FROEBEL'S EDUCATION OF MAN

JARVIS

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THE

EDUCATION OF MAN.

BY

FRIEDRICH FROEBEL.

TRANSLATED BY JOSEPHINE JARVIS

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AMERICAN PREFACE.

By Elizabeth P. Peabody.

THIS first work of Frederic Froebel, published in 1826, is imperatively called for by the American public, which has become so widely impressed with the value of his System of Education. This system embodies the wisdom of ages, and is founded upon a deeper insight into the nature of children than has been expressed by any others, with the exception of him who pronounced them "of the kingdom of Heaven."

He had been for ten years engaged with friends in an attempt to educate children, who come to him at ten years old, and who, he found, had at that age much to unlearn. His work is addressed to mothers, whom he thought at the moment the only persons competent to educate children into the harmony of heart, intellect, and hand, during the first seven years of their age. It has in it all the elements of kindergarten nurture; for he tells what children need and must have for development. But in the course of the next twelve years he learned that no mortal mother could have the strength to do all that is due to children in order that justice may be done to their natures, but that she must have assistance; and he invented the kindergarten in 1839, in which he proposed that from twelve to twenty-five children should be gathered for three hours every day, from several families, under the care of a mother's assistant, whom he called a kindergartner, and be played with in the mother's genial, cherishing way till old enough to be sent to school and taught to read at seven years of age, which he thought early enough to teach them the signs of the ideas they would have acquired by the cultivation of their perceptive and artistic faculties, their observation, attention, and colloquial use

of language. Children are to be guided to make a beginning in all the arts and sciences without interference with their spontaneity, the instinct of imitation being so used as to give them order without constraining them.

The "Mother-Love and Nursery Songs" were translated by the same able hand, and published in Boston by the munificent assistance of Mrs. Quincy Shaw. This book has been used as the Manual for training Kindergartners by Miss Blow of St. Louis, and other eminent teachers. It will be found very valuable in educating mothers into wise coöperation with the kindergartners, as well as in educating kindergartners into sympathy with mothers.

There is another volume, consisting of articles published by Froebel in periodicals, which were edited by Wichard Lange after his death; and we hope to see it published by another year; for these three volumes would give us all the written works of this great educational genius. Miss Jarvis has it in translation.

Part I.

FOUNDATION OF THE WHOLE.

Section 1.

An eternal law acts and rules in all. It has expressed and now expresses itself outwardly in Nature, as well as inwardly in the spirit and in life, which unites the two; it has expressed and now expresses itself with equal clearness and precision to him whose heart and faith are inevitably so filled, penetrated, and living, that he cannot be otherwise than he is; or to him whose clear, quiet, spiritual eye sees into the outward, and perceives the inward by means of the outward, and sees the outward necessarily and surely proceed from the nature of the inward. An all-working, self-animating, self-knowing — therefore eternally existing — unity necessarily lies at the foundation of this all-ruling law. This law works in like manner again; so that it, the unity itself, vivified, comprehensively recognized through faith or through perception, has been always surely recognized at all times by a quiet, thoughtful intellect, by a bright, clear human spirit; and always will be recognized by such a mind and spirit.

This unity is God.

All has proceeded from God, and is limited by God alone: in God is the sole origin of all things.

God rests, acts, rules, in all.

All rests, lives, exists, in God and through God.

All things exist only because the divine works in them.

The divine which works in each thing is the nature of each thing.

Section 2.

The destiny, as well as the vocation, of all things is to represent their nature through development, and thus the divine in them: to make known and manifest God in the outward and transitory things.

The special destiny, as well as the particular vocation, of man as an understanding and rational being, is to bring his nature, the divine in him, thus God, and his destiny, his vocation, himself, to complete consciousness, to vivid recognition, to clear insight, and with self-determination and freedom to practise all this in his own life, to allow it to act, to manifest it.

To treat man as a thinking, understanding being, who is becoming conscious of himself; to incite him to the pure, unviolated representation of the inner law, of the God-like, with consciousness and self-determination; and to produce ways and means for this representation, is to educate man

Section 3.

To recognize and become conscious of this eternal law, to discern its foundation, its nature, the wholeness, the coherence and the activity of its workings, to know life, to know life in its totality, is science. — the science of life.

And the representation and practice by the conscious, thinking, understanding being, is the science of education.

The precept for a thinking, understanding being to become conscious of his vocation, and to attain his destiny, which proceeds from the recognition of, and insight into, this law, is a theory of education.

By independent action to apply this recognition and insight to direct development and cultivation of the reasoning being to the attainment of his destiny, is the art of education.

The aim of education is to represent life, pure, inviolable, true to its vocation, and therefore holy.

Recognition and application, consciousness and representation, united in living a pure, holy life, true to its vocation, form the wisdom of life, — are wisdom itself.

Section 4.

To be wise is the highest effort of man, his highest act of self-determination.

To educate one's self and others, to educate consciously, freely, and self-determinately, is the dual act of wisdom; it *began* with the first appearance of the individual human being upon earth, and *was there* with the first appearance of complete self-consciousness of the individual being; it *begins now* to express itself as a necessary general

requirement of humanity, and as such to find a hearing and to be applied. This act is the first step upon the path which alone leads to life; which surely leads to the fulfilment of the inner, and through this also to the fulfilment of the outer, requirements of the human nature; which leads to blessed living, to a pure, holy life, true to its vocation.

Section 5.

The divine in man, his nature, therefore, is to be and must be developed to consciousness by education; and man must be raised to free, conscious living in accordance with the divine, thus to free representation of the divine which acts within him.

Education should and must bring man to perceive and recognize the divine which is in Nature, which forms the character of Nature, and is abidingly expressed in it: education should also express and represent Nature and the divine in lively reciprocal action, and, united with this instruction, should represent the similarity of laws between the two, as well as between Nature and man.

Education in its totality is to raise to consciousness in man, and to make efficient in life, the fact that man and Nature proceeded from God, are limited by him, and rest in him.

Education is to guide man to clearness about himself and in himself, to peace with Nature, and to union with God; therefore it is to raise man to the recognition of himself and of humanity, to the recognition of God and Nature, and to the pure, holy life thereby conditioned.

Section 6.

But in all these requirements education is founded upon the inward and innermost.

Every thing inward is recognized from the inward to the outward and by means of the outward. The nature, the divine, the spirit of things and of man, are recognized by their utterances. If for man, now, the utterances of man and of things are the same with which all education, all instruction, all life, connects itself as a product of freedom, and, proceeding from the outer to the inner, acts and argues, nevertheless education cannot directly argue from the outer to the inner; but the nature of things requires that always, in whatever reference, it is to be argued from the outer to the inner, and from the inner to the outer. So it is inadmissible to argue from the manifold-

ness and plurality in Nature to a plan of the ultimate limitation of Nature, or to a plurality of gods; it is equally inadmissible to argue from the unity of God to a finality of Nature; but in both cases the argument must proceed from the manifoldness in Nature to the unity of its ultimate origin, God, and from the unity of God to the eternally continuing manifoldness of the developments of Nature.

The non-application of the truth I have just expressed, but much more the constant sinning against it, the direct conclusion from certain outward phenomena in child-life and boy-life upon the inner life of child and boy, is the most essential ground of the combating, opposing phenomena of the abortive attempts so frequent in life and in education. This is certainly the foundation of many mistakes with regard to children, boys and youths; of so many failures in the education of children; of so much misunderstanding between parent and child, either on one side or another; of so much unnecessary complaint, as well as of unseemly arrogance and foolish expectation on the part of the children. Therefore the application of this truth is so highly important for parents, educators, and teachers, that they should collectively exert themselves to become familiar with even the minutiæ of its application. This would bring into the relations between parents and children, pupils and educators, scholars and teachers, a clearness, a certainty, even a repose, which are now vainly striven for. Since the child who outwardly appears good is often in himself not good, — that is, he does not will the good from his own determination, or from love, respect, or recognition of it, — so the outwardly rough, defiant, self-willed child, who therefore does not appear good from his own determination, or from love, respect, or recognition of it, has often within himself the most active, eager, vigorous struggles toward representation of the good by his own determination; the outwardly absent-minded boy has within himself an abiding, fixed thought which will not let him pay attention to outside things.

Section 7.

Therefore education, instruction, and teaching should in the first characteristics necessarily be passive, watchfully and protectively following, not dictatorial, not invariable, not forcibly interfering.

Section 8.

But education in itself must necessarily be passive, watchfully and protectively following; for the effect of the divine is, when undisturbed, necessarily good: in fact, it cannot be otherwise than good. This necessity must presuppose that the still young human being, even though as yet unconsciously, like a product of Nature, precisely and surely wills that which is best for himself, and, moreover, in a form quite suitable to him, and which he feels within himself the disposition, power, and means to represent. So the young duckling hastens to the pond and into the water, while the chicken scratches in the earth, and the young swallow catches his food on the wing, and rarely touches the earth. Now, whatever may be said against the truth of reversed conclusions before expressed, and this truth of cautious following, and also against the application of both to education, and however much these truths may be contested, yet they will vindicate themselves in their clearness and truth to that generation which, wholly confiding in them, applies them.

We give time and space to young plants and young animals, knowing that they then beautifully unfold, and grow well, in conformity with the laws which act in each individual; we let them rest, and strive to avoid powerfully interfering influences upon them, knowing that these influences disturb their pure unfolding and healthy development: but the young human being is to man a piece of wax, a lump of clay, from which he can mould what he will. — Men, who wander through your fields, gardens, and groves, why do you not open your minds to receive what Nature in dumb speech teaches you? Look at the plants which you call weeds, and which, grown up here compressed and constrained, scarcely permit one to guess at their inner symmetry; but look at them in free space, in field and flower-bed, and see what a symmetry, what a pure inner life they show, harmonizing in all parts and expressions: a regular sun, a radiating star of the earth, springs up.

So, parents, your children on whom you early impress form and vocation against their nature, and who therefore wander around you in languor and unnaturalness, might also become beautiful, self-unfolding, and all-sided self-developing beings.

All active, dictatorial, invariable, and forcibly interfering education and instruction must necessarily have a disturbing, checking, and destructive effect upon the action of the divine, in accordance with and upon the original, unviolated, and healthy state of the

human being. So, continuing to learn from Nature, the plant, the grape-vine, must be pruned; but the pruning, as such, brings no more wine from the grape-vine. Rather the grape-vine may be wholly destroyed by the pruning, however good may be the intention in doing it: at least, its fruitfulness and capacity for bearing fruit are injured if the gardener, in his work, does not passively and thoughtfully follow the nature of the plant. We very frequently take the right steps in our treatment of the objects of Nature, while we go wrong in the management of human beings. And yet there act in both, powers which flow from one fountain, and which act according to the same laws. It is therefore very important for man to observe and consider Nature from this point of view.

Nature, indeed, rarely shows us now that unviolated, original condition, especially in regard to man; but so much the more must it be presupposed, especially of the human being, so long as the opposite has not expressed itself with clearness, because otherwise the unviolated original condition, even where it might still be found, could still be easily destroyed. But if the certainty of the infraction of the original proceeds from the totality of the human being who is to be educated; if this infraction from the inner and outer whole is certain, — in that case, strictly requiring ways of education enter in their full force.

But, further, the interrupted putting-forth of the inward is not always proved with certainty, is, indeed, often difficult to prove; at least this applies to the point, the fountain in which the infraction has its foundation and beginning, and to the direction which it took. The last infallible test lies only in man himself. Therefore, from this point of view, education and all instruction must be much more passive and following than dictatorial and prescriptive; because, through the pure, onward development, the sure, constant progression of the human race — that is, the representation of the divine in man and through the life of man freely and by its own will (which, indeed, is the aim and endeavor of all education and all life, as well as the sole destiny of man) — will be lost utterly.

Therefore the purely requiring, defining, and directing way of educating man begins first with the beginning of his understanding of himself, — with the beginning of the connected life of God and man, — after the beginning of understanding and the common life between father and son, youth and master, because then the true can be derived from the nature of the whole and the nature of the individual, and can then be recognized.

Before, therefore, the disturbance and infraction of the original healthy condition of the pupil is proved and clearly recognized, there remains nothing to do but to bring him into relations with those around him who will observe him on all sides, in whom his behavior is portrayed to him on various sides as in a mirror, and in whom he easily and quickly recognizes it in its effects and results; by whom, therefore, the true situation with respect to himself and others can be easily recognized, where the outbreaks of the inner disturbance of life will be the least harmful.

Section 9.

The directing, interfering education has in general only two things in its favor, — either the clear, vivid thought, the true, self-proved, vivified idea, or the exemplar already previously existing and recognized. But where the self-grounded, vivid thought offers and prescribes that which is in itself true, there the eternal rules, as it were, and just on that account it comes forth again as passive and following. For the vivid thought, the eternal itself, as such, requires and conditions free self-activity and self-determination of man, of the being created for freedom, and resemblance to God.

Section 10.

But the most complete exemplar previously existing and recognized, the most complete model life, will only be a model in its nature, its efforts, but never in its form. It is the greatest misunderstanding of all spiritual human exemplars when they are taken as models in respect to form. Hence the frequent discovery that the phenomenon of the exemplar, if it become the pattern, acts restrictingly, indeed deterioratingly, instead of elevatingly, on the human race.

Section 11.

Jesus himself, therefore, combated throughout his life and teachings this clinging to external models: only the spiritual, striving, active exemplar should be held fast as a type, but the form of it should be left free. The highest, most perfect model life which we Christians see in Jesus, the highest which humanity knows, is that which clearly and vividly recognized the original and primal cause of his being, of his semblance, and of his life, which, self-active and self-dependent,

proceeded by eternal conditions in accordance with the eternal law, from the eternally living, eternally creating One. And this highest, eternal, model life itself requires that *each* man should be again *such* a copy of his perpetual model, that he himself should become *such* a pattern for himself and for others, that he should advance according to eternal laws freely, by his own determination and his own choice. This indeed is, and this only should be, the task and aim of all education. Therefore even the eternal Exemplar himself is passive and following in the requirement of form.

Section 12.

But nevertheless, as we see by experience, the vivid thought, the eternal spiritual exemplar must, according to its nature, determine and require; and so it does. But we see, that, though it is indeed requiring and strict in its summons, it makes an inexorable and limitless stand at the point (but only at the point) where the requirement expresses itself with necessity from the nature of the whole and of the individual, and can be recognized as such when the exemplar speaks as the organ of the necessity, and therefore only conditionally. The exemplar only comes forward with requirements where it presupposes coming in to the others in the principle of the requirement from the spirit, conceiving them, or believing them from the intellect, therefore, either in untroubled childlike relations, or in clear, at least beginning manlike relations. Indeed, in these cases the exemplar makes its requirements either by example or by word, but always only in reference to spirit and life, never in reference to form.

In good education, in genuine instruction, in true teaching, therefore, necessity must call forth freedom; and law, self-determination; the pressure from without, the free will within; the hate from without, the love within. All education — every effect of education, teaching, and instruction — is destroyed where hate produces hate, where law produces deceit and crime, where pressure produces slavery and necessity servitude, where oppression destroys and debases, where strength and hardness produce contumacy and falsehood. In order to avoid these evils and to attain the good results, all that is apparently prescribing must follow in its action. This takes place when all education with its necessary determining requirements, stepping forth in all particulars and ramifications, has this undeniable, resistless imprint, that the requiring one himself is strictly and inevi-

tably subjected to a perpetually governing law, to an unavoidable perpetual necessity; thus all arbitrariness is banished.

Section 13.

All true educators must at each instant, in all their requirements and designs, be at the same time two-sided, — giving and taking, uniting and separating, dictating and following, acting and enduring, deciding and setting free, fixed and movable; and the pupil must be so also. But between the two, educator and pupil, demand and result, there must be an invisible third — to which educator and pupil are alike and equally subjected — to choose the best, the right necessarily proceeding from the conditions, and voluntarily expressing itself. The quiet recognition, the clear knowledge of the choice of this third, and the serene submission to the choice, are what must express themselves in the educator undeviatingly and purely, but must often be firmly and earnestly expressed by him. The child, the pupil, has such a correct discernment, such a right feeling for recognizing whether what the educator or father expresses and requires is expressed by him personally and arbitrarily, or generally and as a necessity, that the child, the pupil, rarely makes a mistake in this.

Section 14.

This submission to an invariable third, to which the pupil as well as the educator is subjected, must therefore express itself even in detail in every requirement of the educator. Therefore the necessary general formula of instruction is as follows: do this, and see what results from your action in this precise respect, and to what discovery it leads you — and so the direction for life for each human being is, represent your spiritual nature, your life outwardly and by means of the outward in action, and see what your nature requires, and how it is constituted.

Jesus himself invites in this direction to the recognition of the truth of his teaching, and therefore this is the direction for attaining to the recognition of all life, of the principle and nature of all life and of all truth.

In this direction is solved and explained the following requirement, and through it is given at once the manner of its solution and fulfilment. The educator must make the individual and particular

general; he must make the general individual and particular, and prove the existence of both. He must make the external internal, and the internal external, and show the necessary unity for both; he must consider the finite infinite, the infinite finite, and balance both in life. He must perceive and contemplate the divine in the human, and evince the nature of man in God, and strive to represent both in one another in life.

This is what proceeds from the nature of man the more clearly and precisely, and expresses itself the more undeniably, the more man observes human development in himself, in the immature human being, and in the race.

Section 15.

Since, then, to demonstrate the infinite in the finite, the eternal in the temporal, the heavenly in the earthly, the divine in the human, in the *life* of man, by *fostering* his original divine nature on every side, appears irrefutably to be the only aim of all education, so, proceeding from this, the only true standpoint, man must be considered and fostered even from birth, as indeed it was with Mary even from the moment of annunciation, while yet invisible, while yet unborn.

Every human being must be recognized and fostered in accordance with his eternal, immortal nature, as the divine shown in human form, as a pledge of the love, the nearness, the favor of God, as a gift of God: this the first Christians actually recognized their children to be, as is testified by the names they gave to them.

Every human being, even as a child, must be recognized, acknowledged, and fostered as a necessary and essential member of humanity; and so the parents should feel and recognize themselves responsible as fosterers, to God, to the child, and to humanity.

Not less, also, should parents observe and consider the child in necessary connection, in clear relation, and in vivid reference to the present, past, and future of human development, and so place the cultivation, the education of the child in connection, accord, and harmony with the present, past, and future demands of the development of man and of the human race: therefore the child should be observed, considered, and treated as a human being with divine, earthly, and human attributes, related to God, to nature, and to man; and thus at the same time a unity, an individuality, and a manifoldness; therefore also comprising and bearing within itself, present, past, and future.

Section 16.

So the man, and humanity in man, must be viewed as an outside appearance, must be viewed, not as already become perfect, not as fixed and stationary, but as constant, yet always progressively developing; eternally living, yet always advancing from one stage of development to another, and toward the aim resting in the supreme and eternal.

It is inexpressibly injurious to view the development and cultivation of humanity as stationary, concluded, and at the present time only repeating itself in greater universality. For the child, as well as each following generation, becomes thus absolutely an imitating, an outwardly dead copy of the preceding one, but not a living model for the future, to future generations, *for the stage of development* on which it stood in the totality of human development. Indeed, each following generation and each following individual man is to pass through the whole earlier development and cultivation of the human race, — and he does pass through it; otherwise he would not understand the world past and present, — but not by the dead way of imitation, of copying, but by the living way of individual, free, active development and cultivation. Each man is to represent this development and cultivation again freely, as a type to himself and to others; for in each man, as a member of humanity and a child of God, is contained all humanity which is represented by, and imprinted on, each in a quite peculiar, individual, personal way, and must be represented in each individual man in this peculiar way; so that the nature of mankind and of God in his infiniteness, and as comprising all manifoldness, may be more and more recognized, and more vividly and precisely anticipated.

Only by this single creating and satisfying, all-embracing and comprehensive recognition of man, and insight into the nature of man, from which flows all that is further necessary to know for the fostering and education of man, — only by this view of man from the beginning, can the true, genuine education and fostering of man grow, blossom, bring forth fruit, and ripen.

Section 17.

From these premises proceeds simply, precisely, and surely, all which parents have to do before and after the annunciation, — to be

pure and clear in word and deed, filled and penetrated by the worth and dignity of the human being; to view themselves as the keepers, protectors, and fosterers of a gift of God; and to inform themselves concerning the vocation and destiny of man, the way in which, and the means by which, man attains his destiny and vocation. As now the vocation of the *child* as *such* is to develop and form the nature of the father and mother, the spiritual and intellectual nature, — for which the talents and the strength may lie in them as yet unknown and unanticipated, — in accord and harmony, so the destiny of *man* as a *child of God and of Nature* is to represent the nature of God and of Nature, the natural and the divine, the earthly and the heavenly, the finite and the infinite, in accord and harmony. As the destiny of the child as a *member of a family* is to develop and represent the nature of the family, the talents and powers of the family in accord, all-sidedness, and clearness, so the destiny of man as a *member of humanity* is to develop, cultivate, and represent the nature, the powers, and talents of all humanity.

Section 18.

But the children and members of a family as such develop and represent most purely and completely the nature of the parents and of the family — which nature may rest in the family, though as yet not at all recognized nor come out, even in anticipation — when each of the children and members develops and represents itself most completely, clearly, and all-sidedly, and yet most individually and personally; and so also, men, as children of God and members of humanity, represent most purely and completely the joint nature of God and humanity — which is in humanity, although by no means as yet generally recognized and acknowledged — when each individual human being, each individual child, forms and represents itself most peculiarly and personally. This is done when man develops and forms himself in the way, and in accordance with the law, by which all things develop and improve, have developed and improved, and which rules and obtains everywhere where being and existence, creator and created, God and Nature, are found; when each man himself represents his nature in unity in itself, in individuality by any individual production outside of himself (principally and especially in clearness and completeness), and in all manifoldness in all which is acted upon by him, by all which he does. But only in this threefold representation, which

is yet in itself *one* and *uniform*, is the demonstration, manifestation, and consequently revelation, of the inner nature of each being complete. Where one side of this threefold representation is lacking, either in fact, or even only in recognition, insight, and acknowledgment, there is imperfect, incomplete representation, incomplete hindering insight. Only in this way does each thing become known and manifest in its unity according to its nature, and on all sides; only the acknowledgment and application of this triple representation of each thing, if it is to completely make known and reveal its nature, lead to the complete representation of each thing, to true insight into its nature.

Section 19.

Therefore the child, the young human being, must, even from his birth, be received in accordance with his nature, rightly treated, and established in the free, all-sided use of his power. The use of some powers and members at the expense of others should not be promoted, nor should the latter be checked in their unfolding: the child should neither be partially chained, fettered, or swathed, nor later kept in leading-strings. The child should early learn to find his own centre of gravity, to rest in it; resting in it to move, to move freely and to be active, to grasp things with his own hands and to hold them fast, to stand and walk on his own feet, to find and look at things with his own eyes, and to use all his limbs equally and with equal strength. The child must early learn and practise the highest and most difficult of all the arts, — to hold fast the central point and point of reference of his life's path in spite of all disguises, disturbances, and hindrances.

Section 20.

The first expression of the child is that of force. The intrusion of force calls forth opposing force: hence the first cry of the child, hence his pushing with his feet against whatever resists them, hence his holding fast what his little hand touches.

Soon after this, and accompanying it, develops the feeling of community: hence his laughter, his well-being, his joyousness, his movability in comfortable warmth, in clear light, and in pure, fresh air. This is the beginning of the child's becoming conscious of himself; and so the first expressions of the child are rest and unrest, pleasure and pain, laughing and crying. Rest, pleasure, and laughter indicate

all which in the sensation of the child is suited to the pure, undisturbed development of his human nature, of the child-life. The first educating, the development, elevation, and representation of life, must be connected with fostering and keeping pure the rest, pleasure, and laughter which are the indications of the child's nature.

Unrest, pain, and crying indicate, when they first appear, all which is opposed to the development of man as a child. Following out these indications also, but in an opposite way, education must be connected with their workings; efforts must be made to find out and remove their cause or causes.

In the very first, but almost only in the very first, appearance of crying, unrest, weeping, all obstinacy and wilfulness are certainly foreign to the child; but these feelings germinate as soon as there comes to the little being who has scarcely appeared as a human plant — it is not yet proved in what way or in what degree — a feeling that it is wilfully, or from inattention or idleness, abandoned to what causes it unrest, and brings pain.

Now, when the child is inoculated with this unhappy feeling, then is engendered the first and most hateful of all errors, — obstinacy, which threatens ruin to the child and to those who are with it, and which is scarcely to be banished without injury to another better disposition in man, and which soon becomes the mother of dissimulation, lying, defiance, contumacy, and all later errors, as sad as they are hateful.

But even in entering on the right way there may be mistakes in manner and form of action.

Man is to be trained up, according to his nature and destiny, by the endurance of little, insignificant troubles, to the endurance of greater suffering and heavier burdens which threaten destruction. If, therefore, the parents and those who are around the child have the firm conviction that the crying, restless child has been provided with all it needs at the time, that every thing has been removed that is or can be prejudicial, then the parents not only can, but should, quietly and silently leave the crying, restless, even screaming child to itself, and calmly give it time to find itself; for if the little being has once or repeatedly, by apparent suffering, and discomfort easy to be borne, extorted the sympathy and help of others, parents and those around the child have lost much, indeed almost every thing, which can scarcely be again regained by force; for the little being has so fine a sense of the weakness of some of those who tend him, that he prefers to use the power originally living and acting in him in the easier way offered

him by the weakness of others, to rule them, rather than to represent and cultivate this power in himself by his own patience, endurance, and action. At this stage, the future man is called a suckling, and is so in the fullest sense of the word; for sucking in is as yet the almost only activity of the child; (does he not suck in the condition of the human beings around him?) and the before-named expressions, "crying" and "laughing," remain as yet wholly within him, and as yet a direct, inseparable effect of that activity.

Man at this stage takes in manifoldness only from without: his whole being is here only an appropriating eye. For this reason even this first stage of man's development is beyond all description important for man's present and future. It is highly important for his present and future life, that at this stage he should absorb nothing diseased, low, vulgar, equivocal, in short, evil. Therefore the glance, the expression of face, of those around the child should be pure, firm, and sure, awakening and nourishing confidence. Even the surroundings, however inadequate they may otherwise be, should be pure and clear, — pure air, clear light, clear space.

For alas! man often scarcely overcomes through his whole life that which he has absorbed in his childhood, the impressions of his youth, just because his whole being was, like a great eye, opened to these impressions, and abandoned to them. Often the hardest combats of man with himself, even the later most adverse and oppressive events of his life, have in this stage of development their cause: therefore is the fostering of the infant so important.

Mothers who have nursed some of their children and not others, and who have observed both in the expressions of their later life, can decide on this subject with precision. Mothers also know that the first laughter of the child marks so precise a portion of time and development in the child's life, that it is at least the expression of the first physical discovery of individuality, if not far more than that. For this first child-laughter has its foundation, not only in a physical feeling of individuality, but also in a physical and yet higher common feeling, at first between mother and child, then with the father and other members of the family, later between brothers and sisters, all human beings and the child.

Section 21.

This first feeling of community which at first unites the child with mother, father, brothers, and sisters, at the foundation of which lies

the higher spiritual union, with which is later connected the indubitable perception that father, mother, brothers, sisters, human beings, feel and recognize themselves in unity and union with a higher, with humanity and with God — this feeling of community is the most extreme germ, the most extreme point of all genuine religiousness, of all genuine effort for unhindered union with the eternal — with God. Genuine, true, living religion, abiding in danger and in combat, in oppression and in need, in pleasure and joy, must come to man in infancy; for the divine, existent and manifest in the finite in man, is early conscious that it has proceeded from the divine, though with dim anticipation; and this dim anticipation, this less than nebulous consciousness must be early fostered and strengthened and nourished in man, and later raised to consciousness.

When the slumbering child is laid by its mother in its soft, safe crib, with an inward soulful glance up to his and her heavenly Father for fatherly protection and loving guidance, it therefore not only rouses the still and invisible observation of the child, but brings to it the eternal welfare and blessing. When the child has awakened with joyous laughter, and the mother takes it from the crib with a glad, silent, grateful glance to his and her Father for the rest and strength which he has sent, with lips moving with this gratitude for the child thus presented to her anew, it is not merely arousing and highly delightful, but also important and rich in blessing for the whole present and future life of the child, and has the most beneficial influence for the whole time of the common life between child and mother which now follows. Therefore the genuine mother is not willing to allow any one else to bring to its crib the sleeping child, or to take from it the awakened child. The child so fostered by its mother is placed in its little crib well, in relation to its earthly, human, heavenly nature, if placed there with a prayer: by God's help man rests in God — the last point of reference as well as the first point of beginning.

If parents desire to provide for their children this never wavering hold, this never vanishing point of reference, as the highest portion for life, then parents and child must show themselves always fervently inwardly and outwardly united when, in a quiet room or in the open air, they feel and recognize themselves in union with their God and Father in prayer. No one should ever say, "The children will not understand it," for this robs the children utterly of their highest life. They do understand it, and will understand it, if only they are not already run wild, if only they are not already too much estranged

from themselves and from their parents: they understand it, not in idea, but in their inner nature. Religiousness, fervid living in God and with God in all conditions and circumstances of life, which does not thus grow up from childhood with man, is later only with extreme difficulty raised to full vigorous life; as, on the contrary, a religious sense thus germinated and fostered amid all the storms and dangers of life will gain the victory. This is the fruit of the earlier and earliest religious parental example, even though the child does not appear to notice or take it in; and this is true of the living, parental example in every case.

Section 22.

It is highly important, not only in reference to the cultivation of the divine and religious in man, but for his entire cultivation, that his development should constantly advance from one point, and should be as constantly recognized and observed in its advance. It is essentially injurious, hindering, even destructive, when such sharp limits and separating opposition are made to the constantly continuing series of the years of human development, that the abidingly continuing and vividly connecting aim of life is wholly withdrawn from observation. It is therefore essentially injurious when the stages of human development — those of infant, child, boy and girl, youth and maiden, man and woman, old man and matron — are considered as essentially separate, and not, as life shows, continually passing into one another without gaps; it is much more injurious to consider the child, the boy, as something wholly different from the youth, the man, so different that the conception, the understanding, and the word of their common humanity scarcely shines through; but this common humanity is almost wholly ignored in life and for life. And yet it is actually so, for one may observe how it is shown in common speech and life that the child, and boy even, are so wholly separate; the later stages speak of the earlier as of something wholly different from them, something quite foreign to them; the boy no longer sees the child in himself, and does not see the boy in the child; the youth no longer sees the boy and child in himself, nor does he see the youth in either of these; he superciliously overlooks, and turns away from them. But most harmful of all is, that man especially no longer perceives in himself the infant, the child, the boy, the youth, the earlier stages of development, but rather speaks of the child, the boy, the youth, as of beings of a wholly different kind, with wholly different natures and qualities.

This separating, disjoining opposition, this sharp defining of boundaries, which is founded upon the want of attention to the development and self-observation of one's own life early begun and constantly continuing, brings unspeakable evil, hindrance, and disturbance of the development and continued cultivation of the human race, which can be merely indicated, not elaborated. Suffice it to say, that singular, rare inner force is required to destroy the limits set from without upon the inward workings, which can only be done by a powerful leap, a forceful action, destroying, or at least disturbing and checking, other developments. All the life-expressions of a man with whom this has taken place at any stage retain, therefore, all through life, something violent. How wholly different it would be in every way, if the parents looked at and observed the child in reference to all stages of human age and development, without overleaping and disregarding any! How different it would be, if they especially observed that the vigorous and complete development and cultivation of each following stage rest upon the vigorous, complete, and individual development of each preceding stage of life! It is this particularly, which parents so easily overlook, so often leave unnoticed. So they suppose and believe that man is a boy when he has attained the age of boyhood; so they suppose the human being to be a youth or a man, when he has attained the youth or manhood: but just as little as the boy is a boy, and the youth a youth, just because he has attained the age of boyhood and youth, but is so because he has lived through his childhood, and later his boyhood, faithful to the requirements of his soul, mind, and body, just as little is the man a man by reaching the age of manhood, but only because the requirements of his childhood, boyhood, and youth, have been faithfully fulfilled by him. Parents and fathers, in other respects very clear-sighted and capable fathers and parents, not only require that the child should show himself already as boy or youth, but they especially require that the boy should show himself as a man, that he should be like a man in all his manifestations, and so overleap the stages of boyhood and youth. Seeing and esteeming in the child and boy the germ, beginning, and outlines of the future man, is quite different from looking upon him already as a man, from requiring of the child and boy to show himself already as youth and man, to feel and think of himself as such, to act and behave with this belief. Parents and fathers who require this, overlook and have forgotten the fact that they are almost always capable parents and fathers, and will become capable men.

only in proportion as they have lived through and in accordance with, and in reference to, each of the stages of their nature, which, according to their requirements, the child is to overleap.

This view, and this undervaluing of the earlier stages of development in reference to the later one (especially of the earliest), is what places such difficulties in the way of the future educator and teacher of the boy, — difficulties scarcely to be removed, since at once the boy thus placed also thinks that he can overleap each instruction of the earlier stage of development; and it has an extremely injurious, weakening effect on him, if he is early given an aim toward which to strive, a something foreign to and outside of himself to imitate; such as, for example, training for a certain profession, a certain sphere of action. The child, the boy, man in general, should have no other struggle than to be at each stage just what that stage requires. Then will each following stage sprout like a new shoot from a healthy bud, and man will, with the same effort, become perfectly what this stage requires; for only the sufficing development of man acts in and upon each preceding and earlier stage, and engenders a satisfactory, complete development of each following later stage.

Section 23.

These ideas are specially important in regard to the development and cultivation of man's activity to the point of bringing forth outward results for practical industry.

Man has now, indeed, a pervading, wholly false, outward, and therefore an untenable conception of work and industry, of activity for outward results; that is, of practical work.

This conception does not awaken and nourish life, still less does it bear within it a germ of life, and it is therefore oppressive, crushing, abasing, hindering, and destroying.

God creates and works uninterruptedly and continually. Each thought of God is a work, an act, a result; and each thought of God works with continuous creating power, producing and representing. Whoever does not already perceive this fact, let him look at the life and work of Jesus; let him look at the genuine life and work of man; let him look — if he lives truly — at his own life and work.

The spirit of God hovered over the unformed, and moved it; and stones and plants, animals and men, received form, figure, existence, and life. God created man in his own image, in the image of God

created he him. Therefore man must create and work like God. Man's spirit must hover over the unformed, and move it, that figure and form may come forth. This is the high sense, the deep significance, the great object, of work and industry, of working and creating, as it is truly and significantly called.

We become like God by diligence and industry, by work and action, which accompany the clear idea, or even the slightest anticipation, indeed only the direct, vivid feeling that we, by this diligence and activity, represent the internal externally; give a body to the spiritual; form to thought; visibility to the invisible; outward, finite, and transitory existence to the eternal that lives in the spirit; and, by the likeness to God thus obtained, mount more and more to genuine recognition of God, to insight into the nature of God; and thus God comes nearer to us outwardly and inwardly. Therefore Jesus said so truly of the poor, "Theirs is the kingdom of heaven," if they only do their work understandingly and knowingly, with diligence and industry, producing and creating. Of the children, also, is the kingdom of heaven, for they, with childlike trust, give themselves up willingly to the impulse toward formation and activity working within them, if not disturbed by the over-wisdom and presumption of adults.

The lowering idea, the delusion that man works, produces, and creates, only in order to earn bread, house, and clothes, is to be only endured, not to be diffused and propagated. No! man creates originally and actually, only that the spiritual and divine in him may take an external form, and that he may thus recognize his own spiritual, divine nature and the nature of God. The bread, house, and clothes coming to him through this working, producing, and creating, are a surplusage and insignificant additions. Therefore Jesus says, "Seek ye first the kingdom," that is, seek to represent the divine in your life and by means of your life, then every thing else which is required for the finite life will be added unto you. Therefore Jesus says, "My meat is to do the will of Him who sent me," — to produce, to create what God has given me in charge, and as he has given it to me.

Therefore the lilies of the field, which according to human view do not toil, are clothed by God more splendidly than Solomon in all his glory; for do not the lilies shoot forth leaves and blossoms? do they not in all their phenomena declare and represent the nature of God?

The fowls of the air sow not, they toil not, in the human idea; but do they not by each of their manifestations — by their singing, by their nest-building, by all their thousand different actions — represent the life which God has given them? Therefore God feeds and keeps them.

So shall man learn from the lilies of the field, from the fowls of the air, always to make known outwardly the nature God has given him, by deed and work, form and material, in the way required by time and place, position and calling, be it at the moment as small and insignificant, or as great and important, as it will. And then shall he be sure of his maintenance. God will show him a hundred ways; he will certainly find each time a means, a way of satisfying his earthly needs by the use of his soul-powers in himself and outside of himself, and more is not requisite. And if every thing external should pass away, there would remain to him — not only uncurtailed, but increased — the developed, divine power to make the need vanish by endurance.

But because an order of time, a gradual succession, limits all spiritual workings in the finite, it is inviolably necessary that when man at any time of his life — be it near or far, early or late — has let slip an opportunity to outwardly prove his power to be a divine power, and to elevate it to a work, or at least to unfold it for work, he meets at some time with a deficiency which is a deficiency in proportion to his neglected opportunities for developing his power. At least it will not be to him at any time what it could have been if he had always faithfully followed out his vocation, the use of his power as a divine power; for, according to the earthly and universal laws under which we live, there must come a time in which the product of that neglected activity should have appeared. Now, if the activity was neglected, how can the product come? When this deficiency appears at any time, there is nothing left for man but to let the second side of his soul-power, that of resignation and endurance, come into action, and so make the deficiency disappear, and to strive most zealously to avoid by efficiency any such deficiency for the future.

There is, then, a double cause, a twofold inalienable requirement, an inner and an outer, and, since the former includes the latter, a highly important perpetual requirement that the budding and growing man be early developed to activity in outside work, in producing; and this is called for by the nature of man.

The activity of the baby's limbs and senses is the first germ, the first bodily activity, the bud, the first impulse to formation; play, building, forming are the first tender blossoms of youth, and at last

point man must be fructified for future industry, diligence, and practical activity. There is no child, and later no boy and youth, whatever may be his rank or position, who should not daily devote at least one or two hours of earnest activity to the production of some definite outside work. Children now learn and do too much of the unformed and formless, and too little work, although the learning by work is immeasurably more impressive and comprehensible, and causes a more living, continuous development in itself and in the children. Children and parents consider the activity of actual work so much to their own prejudice, and so unimportant for their future position, that educational institutions must steadfastly endeavor to put a stop to these notions. The present home education, as well as the school education, leads the children to bodily inactivity and laziness in respect to work: an immense amount of human power remains thus undeveloped, and an immense amount is wholly lost. It would be extremely beneficial if hours of actual work were introduced, as well as the present hours of instruction; and it must yet come to that, for man, by the unmeaning use of his human power, determined only by the outward, has lost the inner and outer proportion of this power, and so has lost the recognition, the estimation, and the true consideration, of this power.

Highly important as is early training for religion, the early training for actual working is equally important. Early work guided suitably to its inner meaning confirms and heightens religion. Religion without work runs the risk of becoming empty dreaming, passing enthusiasm, and an evanescent phantom, as work without religion makes man a beast of burden or a machine. Work and religion were simultaneously created by God, — the Eternal of eternity. Were this recognized, were men impressed with the truth of it, if they would act and work in conformity to it, to what a stage the race of man would soon be raised!

But human power should not merely be quiescent, as religion and religiousness; should not merely show itself outwardly, as industry and labor; but it should, withdrawing into itself, resting on itself, develop, form, produce, and in the latter case should show itself as discretion, temperance, and moderation. What is here more necessary for the man not wholly estranged than to indicate this fact? — where the true, unseparated, inward three work in genuine, original union, where religion, industry, and moderation work in harmony, there is heaven upon earth, there is peace, joy, salvation, grace, and blessing.

So man in the child regarded as a whole, so the life of humanity and man in childhood viewed as a unity, so the whole future efficiency of man, is seen in the child as a germ. And so it must be: man, in order that he and humanity in him may be wholly developed, must be viewed, even in the child, in the totality of the earthly references and in unity. But since all unity demands individualities, and all all-sidedness demands conditions and makes necessary a sequence, so, also, the world and life develop to the child only as individualities, and in sequence. So, also, the powers, qualities, and inclinations of man, the activity of his limbs and senses, should be developed in the necessary succession in which they come forth in the child.

Part II.

MAN IN THE PERIOD OF HIS EARLIEST CHILDHOOD.

Section 24.

To the child, the outside world, though consisting of the same objects, having the same community of members, appears to come out from the void at first in misty, formless darkness, in chaotic confusion, the child and outer world floating therein; and then the objects come forth out of this void, this mist, especially by the word early interposed by the parents, by the mother, first separating the child from the outer world, then again uniting him with it. Single words are at first seldom interposed, but finally more often and in a greater variety, and thus the child comes out at last as a decidedly separate object, quite different from all others.

So repeats itself in the mind and spirit, in the history of the spiritual development, in the history of the attained consciousness of the human being, in each child, in the experience of each child from its birth onward, the history of the development and creation of all things as told by the sacred books, up to the point where the man at last appears, and finds himself in the garden of God, in the beautiful nature lying open before the child; as later is repeated in each child, according to its Nature, the same act with which the moral and human enfranchisement and rationality begins, as the moral and human enfranchisement, the rationality of the whole human race, began, and necessarily, for beings created for freedom, must begin.

It is left to each individual, especially to each one who is heedful of his development, to recognize, contemplate, and comprehend all this, the whole history of the development of the human race, up to the point at which it now stands, or up to the definite point in itself.

But, that he may be able to do so, each man is called on to recognize and consider, early and always, his own life and the lives of others as a continuous whole, developing according to divine laws. Only in such a way does man understand history, the history of human development and the history of his own development, the history of his own heart, mind, and spirit; thus only does he understand others: thus only do parents understand their child.

Section 25.

To make the internal external, to make the external internal, to find the unity for both, is the general outward form in which is expressed the destiny of man. Therefore every outside object meets man with the demand to be recognized, and to be acknowledged in its nature, in its connection. For this purpose man possesses senses, that is, tools by means of which he meets that demand, which is also exhaustively and satisfactorily indicated by the word s-inn (sense) that is, self-active, making eternal.

But each thing is recognized only when it is connected with the opposite of its kind, and when the union, accord, similitude with this object, are found; and the connection with the opposite, and the discovery of the uniting, renders the recognition so much the more complete.

Section 26.

The objects of the outer world appear to man in a more solid, or more liquid, or more gaseous condition. In correspondence with this, man finds himself gifted with senses by which to perceive the more solid, the more liquid, and the more gaseous objects.

But each object again appears more at rest or more in motion. Corresponding to this, each of the senses is again divided into two quite different organs, — the one effecting more the recognition of objects at rest, the other, on the contrary, those in motion; so that therefore the sense for the gaseous is divided between the organs of hearing and seeing; the sense for the liquid, between the organs of tasting and smelling; the sense for the solid, between the organs of feeling and touch.

According to the law of the recognition of things through their opposites, the sense of hearing first develops in the child, and later the sense of sight, guided, limited, and incited by the hearing; by

which development of these two senses in the child it is first made possible to the parents and those who surround it to connect the objects with their opposite, the *word*, and then with the *showing*, so as to make them, as it were, at one with each other, and so to lead the child to perception, and later to recognition thereof.

Section 27.

The use of the body and limbs develops at the time with, and in the same proportion as, the increasing development of the senses, and in an order conditioned in the nature of the child, and in the properties of the corporal world.

The objects of the outer world are more near, more quiescent, and therefore invite rest; or they are more moving, withdrawing, and therefore invite grasping and firm holding, that they may be appropriated; or they are connected with fixed, distant places or spaces, and actually through their remoteness, as in the former case by their movement, call upon him who would bring them nearer to move toward them, and to move them to him.

So the use of the limbs develops the sitting and lying, the grasping and clinging, the moving and springing.

Standing is a totality of all use of the limbs and body, and, indeed, the most complete totality: it is the finding of the centre of gravity of the body.

The bodily standing is just as significant for this stage as the laughter, the physical discovery of self, was for the earlier stage, and as the moral and religious standing is for the last stage, of human development. At this stage of development, the future man only depends upon the use of his body, his senses, and his limbs, purely for use and exercise, but not on account of what proceeds from and by means of this use of body, limbs, and senses. The child is quite indifferent to this, or, more accurately speaking, has no anticipation of it. Hence the child's play with its limbs, its little hands, fingers, its lips, its tongue, its little feet, but also with its eyes and face, which begins at this stage.

At first, indeed, as has just been said, there is no representation of the inner by the outer at the foundation of this play with face and limbs, and this first actually appears at the following stage of development. Yet these plays are first given for observation and confirmation, so that the child may not accustom itself to movements

of the body, and especially of the face, without any inner cause, — as, for instance, rolling the eyes, and twisting the mouth, — and thus slip into a separation between gesture and feeling, between body and spirit, between the external and the internal, which either leads to dissimulation, or causes the body to assume movements and habits which later become no longer subject to the will, can never be laid aside, and accompany man through his whole life as a mask.

Therefore children must, from an early age, never be left on the bed or in the cradle too long, without some object for their activity: this caution will also prevent bodily effeminacy; and bodily effeminacy produces, and necessarily conditions, spiritual effeminacy and weakness.

That this bodily effeminacy may be avoided, the child's bed should from the beginning be less soft. It should consist, therefore, of pillows of hay, sea-grass, fine straw, chaff, or at most horse-hair, but not of feathers. So, also, the child should be but lightly covered while asleep, and should be exposed to the influence of the pure air.

To avoid the evil of leaving the child before sleeping, and especially after waking, on its bed with nothing to occupy it, it is advisable to hang up a cage with a bird in it in the natural line of vision of the child. This attracts the activity of the child's senses and mind, and affords nourishment to this activity in many ways.

Section 28.

With the developed activity of the child's senses, body, and limbs, at the point where the child begins to represent the internal outwardly by its own action, the infant stage of the development of man ends, and the stage of childhood begins.

Up to this stage, the inner nature of man is still an unmembered unity, void of manifoldness.

With the entrance of speech begins the expression and representation of the inner nature of man; with this begins the separation of man's inner nature into its component parts, — the manifoldness of means and aim. The inner nature of man becomes separated into its component parts, and strives to manifest itself outwardly. Man strives by his own power, manifested by independent action, to represent and to form his inner nature outwardly by means of that which is fixed.

With the stage of childhood — with this stage of making the inner nature visible by means of the outward, and of seeking and striving for the union of both, for the unity which connects both — begins the actual education of man, by lessened physical, but increased spiritual fostering and care.

But the education of man is at this stage committed wholly to the father, the mother, the family, with whom he naturally makes up an unpieced, unseparated whole. For the means of representation, speech (considered only in its audible manifestation as speaking) is at this stage wholly unseparated from man. Indeed, he as yet does not at all know and recognize it as something individual: it is one with him, like his arm, his eye, his tongue, without his knowing any thing more of it.

Section 29.

No rule can be fixed and determined in regard to the greater or less importance of the different stages of formation and development of man except the necessary order of their appearance, according to which the earliest is always the most important. Each is of like importance in its place and at its time. Yet this stage of childhood is highly important, because it contains the development of the first connection and union of the child with those who surround it and with the surrounding world; because it is the first stage of interpretation, understanding, and comprehension of its inner nature.

This stage is important; for the manner in which the outer world appears to the unfolding man — whether as noble, or ignoble, low and dead; whether as a thing only for the use, waste, destruction, and enjoyment of others, or as a high, living, spiritual, and divine thing; whether it appears to him as clear or obscure, as ennobling and elevating, or as depressing and debasing; whether he see and recognize things in true or inverted relations — is a matter of high importance.

Therefore the child should at this stage view every thing rightly; and also rightly, precisely, and clearly designate the things and objects themselves, as well as their nature and their properties.

He should rightly designate the relations of the objects to space and time, as well as to each other; should designate each by the right name, by the right word; and should denote each word clearly and purely, according to its elements, voice-sounds, and open and closed sounds.

But since this stage of development requires that man as a child should clearly, correctly, and purely designate every thing, it is therefore essentially necessary that all his surroundings should be brought before him correctly, clearly, and purely, that he may perceive and recognize all in the same manner. These two requirements are inseparable, and reciprocally condition each other.

As speech is as yet one with the speaking human being, at this stage also the language and designation by speech of the speaking child coincide with the object to be designated: that is, the child cannot yet separate word and thing, any more than corporal and spiritual, body and soul. They are as yet one and the same to him. This is shown especially by the play of children at this time: the child expresses itself by play willingly, and, if it can, often.

Play and speaking form the element in which the child now lives. Therefore, also, the child at this stage of human development imparts to each thing capacities for life, feeling, and speech, and believes that each thing can hear. Just because the child begins to represent his inner nature outwardly, he supposes like activity in every thing else around him, be it a stone, a bit of wood, a plant, a flower, or an animal.

And so at this stage the child develops his life in himself, his life with his parents and his family, life with a higher, invisible, Power common to him and to them, and also especially his life in and with Nature as bearing within it a life like his own. Life in and with Nature, and with the clear, still objects of Nature, must be fostered at this time by the parents and members of the family as a chief point of reference of the whole child-life. And this is done especially through play, through the fostering of child-play, which in the beginning is only natural life.

Section 30.

Play. Play is the highest stage of the child's development at this time; for it is freely active representation of the inner, the representation of the inner from the need of the inner itself.

Play is the purest, the most spiritual, product of man at this stage, and is at once the prefiguration and imitation of the total human life, — of the inner, secret, natural life in man and in all things. It produces, therefore, joy, freedom, satisfaction, repose within, and without, peace with the world. The springs of all good rest within it and go out from it. A child who plays equably, spontaneously, quietly,

enduringly, even to the point of bodily fatigue, becomes certainly also a capable, quiet, enduring man, self-sacrificingly promoting his own and others' welfare. Is not the most beautiful phenomenon of child-life the playing child at this period of his life, the child wholly absorbed in his play, the child who has dropped asleep while absorbed in play?

The play at this period is, as has already been indicated, not trivial, but has great earnestness and deep significance. Foster, nourish it, mother! Protect, guard it, father! The future inner life of the child is revealed to the calm, penetrating gaze of one who has a genuine knowledge of human nature in the child's plays chosen spontaneously.

The plays of this age are the buds of the whole future life; for the whole man shows himself in them in his finest qualities, in his inner sense. The whole future life of man has its fount in this space of time, whether this future life be clear or clouded, gentle or boisterous, moving quietly or violently, industrious or lazy, rich or poor in action, dully staring or clearly perceiving, forming or destroying, bringing harmony or discord, war or peace. Allowing for the child's individual and natural qualities, his future relations to father and mother, to his family, to his fellow-citizens and to man, to Nature and to God, depend especially on his manner of life at this age; for the child's life in and with himself, in and with his family, in and with Nature and God, rests here as yet wholly in a unity. So the child at this age scarcely knows which he likes best, — the flowers, or his own pleasure in them, or the pleasure he gives his mother, his parents, when he brings the flowers to them, or the dim anticipation of the dear Giver.

Who can separate into their component parts the joys in which this age is so rich?

If the child is injured in this age, if the buds of the future tree of his life are injured, then will the child, only with the greatest difficulty and the most extreme effort, grow into strong, mature life; only with the greatest difficulty will he insure himself from being stunted, or at least from becoming one-sided, in the course of development and training.

Section 31.

In these years of childhood the child's food and means of nourishment are pre-eminently important, not only for the life of the child at that time, — for the child can be made lazy or active, inert or ener-

getic, dull or bright, weak or vigorous in life, by his food, — but for his whole future life. For the impressions, inclinations, strong desires, which the child has received by his food; the turn which has thus been given to his senses, indeed, to his actual life; the turn given to the activities of his life, can with difficulty be laid aside even by the future self-dependent man. They are one with his whole bodily life, and so, also, have grown with his spiritual life, at least with his sensations and feelings.

Therefore let the first food of the child after his mother's milk be simple and plain, not artificial and manufactured, especially not alluring and exciting to the appetite by being highly spiced, nor fat, that the activity of the inner organs may not be impeded. As a general truth from which each particular precept proceeds, parents and nurses should always say to themselves that man in the future will be happier and stronger, more truly creative on every side, in proportion as the means of life and bodily needs among, in, and with which man as a child grew up, were simple and moderate, suitable to the unpampered nature of man.

Who does not often see in the child, over-excited by too highly-spiced or immoderate food, desires of a very low kind, from which it can never be freed? — desires which, though they may seem suppressed, only slumber, to return with greater power when opportunity offers, and threaten to destroy all the dignity of man, to snatch him away from his duty.

If parents would only consider that not only much future individual, personal happiness, but even much domestic and family happiness, even the welfare of the citizen, depends on the food, how very different would be their management of the child!

But here is the silly mother, there the childish father; and we see poison upon poison given to the children in all forms and kinds, coarse and fine: in the one case, through the oppressive quantity, given only to drive away the ennui of which the unemployed child complains; in the other case, through over-refined food, which excites the bodily, physical life, without spiritual, genuine life-conditions, and thereby exerts an enervating and weakening effect upon the body. In the one case, bodily sluggishness and indolence are considered as rest, which is to be permitted to the child: in the other case, the bodily mobility of the child, unconnected with spiritual, genuine life-influences, the result of over-excitement, is regarded as genuine increase of life, as true life-development.

The promotion and confirmation of the welfare, happiness, and health of the human race, are far more simple than we think. All the means are easy and near to us, but we do not perceive them: we see them, indeed, but we do not consider them. They seem to us too trifling in their simplicity, naturalness, easy applicability, and nearness: we despise them. We seek help from afar, while we alone can help ourselves.

Therefore, later, our ability, whether partially or fully intended, does not reach to the point of making our children what we, with greater insight and clearer view, must recognize as their best, what now does not come to them at all, at least does not come purely and fully, and what would have come to them of itself — not if we had paid a trifle more attention to them in their childhood; no, no — what would have come to them in their childhood if we had expended considerably less for their bodily tendance.

Would that to each young, newly-married pair might be communicated even one of the sad experiences and appearances in its small, simple, and apparently insignificant foundation, and in its incalculable results, which strive to destroy all the good of later education! Would that there could be communicated to them in its vividness, even one of these sad experiences of which the educator is obliged to make hundreds, the knowledge of which can assist him but little to make these phenomena harmless in the later life in which he remarks them; for who does not know the mighty powers of the impressions of youth?

It is easy at the earlier stage to avoid the wrong; it is easy to find the right. The food should be only means of nourishment, never more nor less. The food should never be an object in itself, but only a means of promoting the activity of body and soul; still less should the qualities of the food, its taste and delicacy, be an object in themselves, but only a means conditioned by the object of being a proper, pure, wholesome means of nourishment, else in both cases the food will have a prejudicial effect on the health.

The nourishment of the child should therefore be the simplest which can be provided, and should be given to it in a quantity proportioned to its bodily and mental activity.

Section 32.

But that the child may be able to move and play, develop and form himself, freely, and unhindered in mind and body, his clothing also should be neither pressing nor binding; for such clothing will also press and bind the mind of man. The clothing, in this as well as in the following age, should never be cramping, for the same effect which it has on the body it will have on the mind and soul of the child. The form, color, and fashion of the clothing should never be an aim in itself, for that will make the child superficial and frivolous, a doll instead of a child, a puppet instead of a human being. The clothing, therefore, is by no means unimportant for the child or for the later man, as, in like manner, it is by no means unimportant for Christians to be able to say, "The work and life of Jesus were, like his coat, without piece or seam, a continuous whole; as is also his teaching."

Section 33.

Therefore the aim and object of the tendance of the child by father and mother in the family circle is to awaken and develop, to incite the whole power, the whole disposition, of the human being, to bring out the capability of all his limbs and organs, and to be able to satisfy the demands of his disposition and powers.

Without any teaching, without any demands, without any learning, the natural mother does this spontaneously; but that is not enough: it is necessary, besides, that she should do it as a conscious being, and as acting upon a being who is becoming conscious; leading consciously, with a certain conscious coherence, to the continuous development of man.

Therefore, placing before her what she has unconsciously done according to its nature, its significance, and its connection, may bring her to consciousness. True, the most simple mother could do this; but observing mothers could do it still more truly, completely, and deeply: yet through incompleteness man mounts to completeness. So this bringing forward the mother's work may awaken true, silent, thoughtful, and reasonable parental love, and bring us to an insight and consciousness of the course of development in our childhood in an entire presentation of its expressions.

"Give your little arm here," "Where's your little hand?" says the training mother, seeking to bring forward, and to make the child

anticipate, the manifoldness of his body and the variety of its members.

"Bite your little finger." This is especially a method of action rightly guided by the deep, natural feeling of the thoughtful and childlike jesting mother, in order to lead the child to the perception and knowledge of a particular object which is yet united with himself, and to lead the child already to the earliest phenomena of future reflection.

Not less important is the lovely, playful, jesting manner in which the mother leads the child to the knowledge of the members which are *not* seen nor looked at by him, — the nose, the ears, the tongue, the teeth.

The mother pulls softly the child's nose or ear, as if she would separate it from the head or face, and says, showing him the half-hidden finger-tip, "There, I have the ear — the little nose"; and the child grasps quickly for ear and nose, and laughs joyously to feel them both still in their places.

This treatment of the mother in the beginning incites the child to bring to his knowledge every thing, even if he cannot outwardly see and perceive it.

All this has the object of bringing the child, as a boy, at some time to consciousness of himself, to reflection, to reflection about himself; as a ten-year-old boy in charge of a teacher, and in like manner led from a sense of Nature, said to himself when, as he thought, unobserved, "I am not my arm; I am not my ear, either; I can separate all my limbs and organs of sense from myself, and I remain always myself: who am I then actually? who or what is then actually this thing which I call I?"

In like spirit the mother-love continues to act and speak with the little one when she says, "Show me your little tongue," "Show me your little teeth," "Bite with your little teeth," in order thus immediately to lead him to the use of them.

"Put your little foot in" — in the stocking, in the shoe; "There is the little foot" — in the stocking, in the shoe.

So the mother's love and thoughtfulness gradually brings his little outer world before the child, advancing from the undivided to the separate, from the near to the far. And as she tried in this way to bring the little one to perceive objects by themselves and in their relations to space, so she soon also brings to the child's knowledge their properties, and naturally, first of all, the effects of these proper-

ties, first in their quiescent state. "The light burns," and the mother draws the child's finger toward the light, so that he may feel its fire without actually burning himself, in order to guard him from the unknown danger; or "The knife pricks," says the careful mother, gently pressing the point of the knife against the child's finger; "The soup is hot, it burns," setting before the child the permanence, the existing, of the acting property, or its cause.

"The knife is pointed; it is sharp; it pricks; it cuts; let it alone."

From the recognition of the effect, the mother leads the child to the quiescent, abiding cause, the quiescent, abiding property, — sharp, pointed, — and later from the knowledge of the quiescent property to its effects, — pricking, cutting, — without his experiencing its full effect on himself.

Further: the mother brings to the child its own handling of the same; at first for feeling, later for perceiving.

So the mother, conveying delightful instruction in all her doings and by the constant connection of word and deed, says to the child when it is to take food, "Open your little mouth"; when washing it, "Shut your little eyes." Or the mother teaches the child to recognize the object of his management: in this sense the mother says, when she lays the child on its bed, "Sleep, sleep"; or, when she puts the food to his mouth in a spoon, "Eat, baby." And in order to call his attention to the effect of the food on the organ of taste to the relation of the food to the body, she says, "That tastes good." In order to call his attention to the odor of the flowers, the mother makes the sound of smelling, and says, "That smells good; smell of it, my child"; or, on the contrary, turns away her face with an expression of disgust from the flowers, which she takes away from the child.

So the simplest mother, who almost bashfully withdraws into privacy with her darling (in order not to let unhallowed eyes dwell upon this blessedness) strives in the most natural manner to bring the child into the full activity of its mind and senses.

Alas! we, through our conceitedness, lose sight of this natural and divine point of departure for all human development; we stand helpless, having lost the right direction by losing the points for beginning and ending. Renouncing God and Nature, we seek counsel from human cleverness and human wit. We build card-houses; but the management of Mother Nature finds no place, divine influences no room; and the slightest indication of the child, moved

by the pleasure and stress of life, throws our building into heaps. If it stands, the child must become fettered, if not spiritually, then physically. Whither has a word brought us?

Into the nursery of those learned in words, the so-called cultivated people, who scarcely believe that there is any thing in the child which, if it is to exist, must necessarily be early developed, who still less know that all that the child is at some time to be and to become lies in him, though as yet in so slight a degree, and if it is to come to him, can necessarily only do so if developed from him.

Therefore how dead, how cold, is every thing here! or, at best, what screaming and lamenting there is!

But is not the mother then here?

Oh, it is not the mother's room, it is only the nursery (the children's room).

Come, let us go again where not only the mother's and children's room, but even the mother and child, are still one, where only with unwillingness does the mother give up her child to the care of strangers. Let us see and hear how the mother there brings objects in their motion before the child, saying, "Hark! the birdie peeps"; "The dog says 'bow-wow.'" And now, leading from the expression to the name, from the development of the sense of hearing to the development of the sense of sight, she says, "Where is the peeping birdie?" "Where is the bow-wow?"

The mother even goes so far as to lead from the connected perception of the object and its property to the single perception of the property itself. "The birdie flies," says the mother, in speaking of the real bird which is flying. "See the birdie!" says the mother at a later period to the child, referring to the wavering, unstable point of light caused by the reflection of a mirror or a movable surface of water.

In order now to lead the child to perceive that this is an immaterial phenomenon, having its motion only in common with the bird, the mother says, "Catch the birdie," giving the child the opportunity of putting its hands over the point of light. Or, in order to lead the child to perceive the movement itself, and nothing else, the mother says, "Bim, bom," in reference to the pendulum motion of any thing linear, or "To, fro."

In a similar way the mother tries to call the child's attention to the change in things; for example, pointing to the light, "There is the light, there is the light"; taking it away, "The light is gone"; or, "The father comes," "The father is gone."

Or, calling its attention to the voluntary motion of things, "Come, kitty, come to my child;" "Kitty runs away."

So she incites the activity of the child's body and limbs by saying, "Hold the flower," "Catch the kitty," or, while she slowly rolls the ball, "Catch the ball."

The all-embracing mother-love seeks to awaken and make clear the common feeling so important between the child and its father and brothers and sisters by saying, "Stroke the dear father;" or, while she strokes the child's own hand over its father's cheek, "Dear father," or "Stroke little sister," and again saying, "Dear sister," etc.

Beside the feeling of community, the egg from which such glorious things develop, the mother-love, the all-comprising motherly thoughtfulness, tries also to bring the child to feel life in itself through motion, and, which is especially important, through regular, measured, rhythmical sounds.

So the genuine, natural mother slowly and on all sides follows the progressive, all-sided, regnant life in the child; strengthens it, and thus awakens increasingly the more all-sided life as yet deeply slumbering in the child, and develops that also.

Others suppose a void in the child, wish to inoculate him with life, making him as empty as they believe him to be, and giving him death. And so this simple, natural guidance to the development of the rhythmic, legitimate linking of all human expressions of life as a means of cultivation in speech and musical tone is so wholly lost because its importance is recognized by few, and still fewer retain it, and further develop the human being in accordance with it, and connect with it the more extended development of man.

And therefore the pure, early development of rhythmic, legitimate motion, would be highly beneficial in the next and later stages of the whole life of the child and man. We take a great deal upon ourselves as educators, in reference to the child as a pupil and a human being, in so soon withdrawing in early training the rhythmic, measured movement in accordance with the laws of development.

The child would more easily comprehend the legitimate, suitable proportion of his life, if this rhythmic movement were retained. Much wilfulness, incongruity, and roughness would disappear from life, action, and movement. More just proportion and moderation, more harmony, would come into life, and later a more impressive sense of Nature and art, music and poetry, would be developed.

Also the singing by quite small children when they are quiet, or

especially when they are going to sleep, has not been unremarked by the careful, thinking mother, and should be yet more observed and developed by those who have the charge of children, as the first germ of future development in melody and song. There would certainly soon be shown here such independent activity on the part of the children as is shown in speech when children, with the capacity for speech thus developed and later appearing, meet with words as the designation of new conceptions, and peculiar connections, and relations of properties not yet remarked.

So quite a little girl, who had been brought up in a purely child-like way, guided by her mother, after long and thoughtfully feeling of and looking at the leaves of a plant covered with a strong, soft down, exclaimed joyfully to her mother, "Oh, how woolly!"

The mother was not conscious that she had ever called the child's attention to such a property.

So this child saw the two most brilliant planets just as they were standing very near each other in the sky in a clear, starlight night. "Father and mother stars!" cried the child joyously, without the mother's being in the least able to say how this connection with and application to the stars had been awakened in the child.

Section 34.

Neither crutches nor leading-strings should be employed to induce the child to stand or run. He should stand when he has the power to keep his balance spontaneously and independently, and should walk when he can independently keep his balance while spontaneously moving forward. He should not stand before he can sit upright, and draw himself up by means of some tall object standing near him, and so finally keep his balance without support. He should not walk till he can creep and raise himself voluntarily, keep his balance, and, keeping it, go forward. At first, when he has spontaneously risen to his feet at some distance from his mother, he will be prompted to walk that he may return to her lap. But soon the child feels the power in his own feet, and now for his own pleasure repeats the newly-learned art, just for the sake of walking, as he did before with the art of standing. A short time more, and without his knowledge he exercises the art of feeling; and now he is charmed with the variegated, round, smooth pebble, the gay-colored, fluttering bit of paper. The smooth, symmetrical, triangular or quadrangular bit of

board, piece of wood; the rectangular bricks which he can build upon, and by the side of each other; the sheet of paper, attractive by its form, its color, its shine, its composition,—all charm him, and he seeks to appropriate to himself such things by the newly-acquired use of his limbs; seeks to bring like things together, and to separate unlike things from each other. See the child who can scarcely hold itself upright, and so can only go forward with great caution: he sees a grain of rice, a bit of straw; he labors hard to get it, as a bird does in the spring to carry it to his nest. See the child stoop with difficulty under the drip of the roof, and move slowly away. The force of the rain falling from the roof has washed up some little smooth-colored stones, and the all-observant gaze of the child sees them as stones, as materials for future building, and he collects them for that purpose.

And is he wrong? Is it not actually so? Does not the child collect materials for his future life-building? In that building, like things will be grouped, unlike things separated: man is to put together, not that which is rough, but what has been deprived of roughness.

Section 35.

If the building is to be suitable, each material must be fully known, not only by its name, but also by its properties and its use; and that the child desires this is shown to us by his childlike, quiet, eager acts. We call it "childish" because we do not understand it, because we have no eyes to see, no ears to hear, and still less feeling to feel, with the child: we are therefore dead — the life of the child is dead to us. We cannot make it clear to ourselves: how, then, can we make it clear to the child? And yet this is the yearning that attracts the child to us. How can we give language to the objects of the child's life when they are dumb to us? And yet this is the innermost longing with which the child brings his store to us in his little fast-closed hands, and lays it in our lap, as if, thus warmed, it would give him knowledge of itself. Every thing which enters into his small range of vision, which widens his as yet narrow world, is dear to him. The smallest thing is to him a new discovery. But it must not come dead into the little world; it must not remain dead in it: else the small range of vision will be darkened, the young world crushed.

Therefore the child would like to know why each thing is dear to him; he would like to know all its properties, its innermost nature, in order at some time to understand itself. Therefore the child turns

the object on all sides; therefore he tears and pounds it; therefore he puts it in his mouth, and bites, or at least tries to bite it.

We blame the child for naughtiness and foolishness; but is he not more wise than we who blame? The child wishes to discover the inside of the thing, being urged to this by an impulse he has not given to himself, — the impulse which, rightly recognized and rightly guided, seeks to know God in all his works. God gave him understanding, reason, and speech: the persons who guide him do not satisfy his impulse, cannot satisfy it. Where can the child seek for satisfaction of his impulse to research, but from the thing itself?

But of course the thing which has been dismembered also remains dumb; but does it not show in its separation either like or unlike parts? — there the stone broken in pieces, here the flower torn in pieces. And is not this already an extension of knowledge? Do we adults increase our knowledge in any other way? Is not the inside of the plant pithy, hollow, or woody? Is not the section of it round or edged, and three, or four, or five edged? Are not the separated surfaces even or uneven, smooth or rough, dense or porous, splintered or shelly, or indented or fibrous? Are not the fragments sharp-edged or blunt-edged? Does it easily shiver to pieces, or does it rather yield to the blows?

And the child does this, in order, out of the manifoldness of the outward phenomena of the thing, to make known to himself its inner nature and its relation to himself, — in order to recognize, first of all, the cause of his love, his inclination, his attraction, to it. And do we larger people, we adults, we investigators, do otherwise?

But if the teacher from the chair of the lecturer does this, if he prompts our sons to it, then first does it acquire value, and assume importance to us; but in the child's action we overlook it.

Therefore even the expression presented in the most lucid manner by the teacher is so frequently without effect on our sons, because they are now obliged to learn from the teacher what they should have learned in childhood by our help, by means of our explaining, vivifying word, and which they would have learned almost by themselves.

And very, very little is needed from those around the child, to give it what the years of childhood require. We need only to designate, to name, to give words to what the child does, seeks, perceives, and finds.

Rich is the life of the child ripening into boyhood; but we see it not: vivid is his life; but we feel it not. His life is suited to the

destiny and vocation of man; but we do not even conjecture it. We not only do not foster, guard, develop, the inner germ of this life, but we allow it to be crushed and silenced by the weight of its own efforts, or it finds pleasure for itself in unnaturalness on some weak side of its nature; in which case we perceive the same phenomenon which in the first case, in plants, we call pining, in the second, a sucker: we perceive misdirection of energies, and of the bias and impulse, in the child (the human plant) as well as in the vegetable.

Now, we would like well to guide otherwise the energies and sap (life-giving power), bias and impulse, in the child advancing to boyhood, but it is already too late; for we have not only not recognized, but misconceived: we have not only not fostered, but displaced and stifled, the thoughtful significance of his life.

Section 36.

See! — a child has there a stone he has just found, which, in order to conclude on its properties by its effects, he rubs on a bit of board lying near him, thereby discovering the property of coloring. It is a bit of lime or clay, — red or white chalk.

See how the child delights in the newly-discovered property, and how he makes use of it with busy arm and eager hand! In a short time the surface of the board is nearly covered. At first the before unknown property, then the altered surface, delights the child, — now red, now white; now black, now brown, — but soon he finds pleasure in the winding, straight, curved, and other forms. By these linear appearances the child's attention is drawn to the linear property of surrounding objects. Now the head becomes a round, and the rounding line, returning to its beginning-point, becomes a head; the oval line connected with it, a back; arms and legs appear as straight or crooked lines, and such lines become to the child arms and legs; he looks upon fingers as lines coming together at a point, and lines thus connected become to him hands and fingers; eyes appear to him as points, and points become eyes; and a new world grows up within and around him; for what man tries to represent he begins to understand.

A manifold and new world comes to the child by the comprehension and representation of lines; not only because this representation presents the outside world in miniature, and so is more easily comprehensible to his eyes and senses; not only that he can represent

outwardly what he carries within him as a remembrance or a new connection, but that the knowledge of the new, invisible world, the world of powers, draws thence its fine rootlets.

The rolling sphere, the thrown and falling stone, the water dammed up, and guided into little diverging ditches, have taught the child that the direction of the effect of power is always linear. The representation of objects by lines leads the child soon to the perception and representation of the direction in which the power works. "There flows a brook"; and, saying this, the child makes a mark to indicate the course of the brook.

The child has connected lines which represent a tree to him; "a branch grows out there, and another here"; and at the instant of speaking he draws the lines off from the tree to represent the branches.

Very descriptively the child says, "There comes a birdie flying," and immediately draws a winding line in the direction of the imaginary flight.

Give the child chalk, or any thing similar, and soon a new creation will stand before him and you. The father makes for him a man or a horse with a few lines: this line-man, this line-horse gives the child more pleasure than is given to him by the actual form or man.

Section 37.

How are you mothers and nurses to guide the child to this point? If you are only willing to see and observe, the child himself will teach you.

Here the child is drawing a table by going round its edges as far as he can reach them. The child thus, as it were, draws the object on the object itself. This is the first, and, to the child, the surest step by which he makes himself aware of the boundaries and form of the object. In like manner the child draws and indicates chair, bench, and window.

But the child soon makes an advance. Here he draws the cross-lines on four-cornered bits of board, on the leaf of the table, on the seat of the bench and chair, in the dim anticipation that so the forms and relations of the surfaces can be retained. Now the child already draws the form diminished.

See! there the child has drawn table, chair, and bench on a leaf of the table. Do you not see how it developed itself for this, and

trained itself to it? Objects which he could move, which were in sight, he laid on the board, or bench, or table, and drew their form on the plane surface, following the boundaries of the objects with his hand. Soon scissors and boxes, but soon, also, leaves and twigs, even his own hand, or the shadows of objects, will be thus copied.

Much is developed in the child by this action, more than it is possible to express; he gains by this clear comprehension of the form the possibility of representing the form separate from the object, the possibility of retaining the form as such, the strengthening and fitting of the arm and hand for the free representation of form.

The fostering mother, the careful father, the heedful family (without a natural artist among them, and often without having ever drawn, themselves), can carry the child on far enough for him to be able to draw a straight line, a cross line with tolerable accuracy, even to draw a rectangular object in a vertical position (for example, a looking-glass or window), with some resemblance to the original; and also many other things.

But it is not only good, but even necessary, in order to develop and increase the power and capacity of the child, that the father and mother should, without being over-anxious or careless, always connect the action of the child with words; for example, I am drawing a table, a looking-glass, the cross line of the backgammon-board.

To the child, this mode of procedure heightens the inner and outer power, extends the knowledge, awakens the power of judgment, and the thoughtfulness which protects from so much incorrectness, — all which qualities cannot too soon come to man *in his intercourse with Nature*. For word and sign are reciprocally explaining and completing, since neither of them is individually exhaustive and sufficing in respect to the object represented. The sign actually stands between the word and the thing, has properties in common with each, and is for that reason so very important as a means of training and development for the child. The genuine sign has this in common with the thing, — that it strives to represent the form and outlines of the thing: it has this in common with the word, — that it is never the thing itself, but only an image of it. Again: word and sign are of a purely opposite nature; for the sign is dead while the word is living; the sign is visible while the word is audible. Therefore word and sign belong inseparably together, as do light and shade, day and night, spirit and body. Therefore the capacity for

signs is as innate in the child as the capacity for speech, and as absolutely requires development and cultivation; as is shown in experience of the child's pleasure in and ardent desire for signs.

Section 38.

The representation of an object by a sign, and the exact perception conditioned and required by the representation, lead the child soon and quickly to recognize the constantly returning connection of a like quantity of objects of a similar kind; for example, two eyes and two arms, five fingers and five toes, six legs of the bug and fly; and so the sign for the object leads to the recognition and notice of the number. The repeated return of one and the same object conditions number. The precise different quantity, in any respect, of objects of the same kind, is the number of those objects.

Thus the child's sphere of knowledge, the world of his life, is again extended by the observation and recognition, by the development and cultivation, of the capacity of number; and an essential need of his inner nature, a certain yearning of his spirit, are thereby satisfied; for, up to this point, the child contemplated his greater or smaller quantities of like and unlike objects with a certain longing, a dim anticipation that he still lacks a means of knowledge. It was not yet possible for him to recognize, comprehend, and determine the relations of quantity of the different heaps he made; but now he knows that he has two large and three small pebbles, four white and five yellow flowers, etc. The knowledge of the relations of quantity extraordinarily heightens the life of the child. But the mind of the child requires that here the mother and those around the child should develop in him the capacity for counting, in the beginning, in the manner which lies in the nature of number and according to the laws of thought conditioned in the mind of man ever after the demand for number shows itself in the child's life.

If we quietly observe the child, we shall easily find how the child goes, though unconsciously, in the path marked out by the laws of human thought, rising from the visible to the invisible and the ideal; for the child at first places together objects of a like kind, and obtains thus, for example, apples, nuts, pears, beans.

The mother, or the loving, guiding nurse, now only joins to the child's action the explaining word; that is, connects the visible with the audible, and thus brings it nearer to the insight, recogni-

tion, and inner perception of the child; namely, apples, pears, nuts, beans, etc.

Who has not seen, who has not had the opportunity of seeing, how the child lays the objects of each kind singly, side by side in a row? Here again the mother adds the explaining word; for example: —

apples, apples, apples, apples, nothing but apples;
pear, pear, pear, pear, nothing but pears;
nut, nut, nut, nut, nothing but nuts;
bean, bean, bean, bean, nothing but beans;

or whatever else the child groups together: there are always several of each kind of the different objects or things.

While the mother has the child place one object by another, she also expresses this action in common with the child precisely and clearly; for example: —

an apple, another apple, another apple, another apple, many apples;
a pear, another pear, another pear, another pear, many pears;
a nut, another nut, another nut, another nut, many nuts;
a bean, another bean, another bean, another bean, many beans;

so also with the fingers, etc. A quantity of each kind of object increases always by the regular adding of one object of that kind.

Instead of the indefinite words "another," "another," the mother gives the number which accurately designates the increase, actually counting the objects with the child; for example: —

one apple, two apples, three apples, four apples, etc.;
one pear, two pears, three pears, four pears, etc.;
one nut, two nuts, three nuts, four nuts, etc.;
one bean, two beans, three beans, four beans, etc.

Again, the mother lays several of each kind of objects in a naturally increasing quantity, and designates her action by word; for example: —

* apple	* pear	* nut	* bean
* * apples	* * pears	* * nuts	* * beans
* * * apples	* * * pears	* * * nuts	* * * beans
* * * * apples	* * * * pears	* * * * nuts	* * * * beans, etc.

Later the mother and child speak the words together. Lastly the

mother lets the child perform alone the action as well as the designation by word (counting).

As here with each number the kind of object has been indicated and expressed, so the mother and child may run through the numbers alone, naming the kind of object at the close; for example: —

* (one) * * (two) * * * (three) * * * * (four) apples;
* (one) * * (two) * * * (three) * * * * (four) pears;
* (one) * * (two) * * * (three) * * * * (four) nuts;
* (one) * * (two) * * * (three) * * * * (four) beans, etc.

Here the quantity of the objects is considered with reference principally to their precise number, with a final reference to the kind.

Lastly the mother designates only the precise numbers in their sequence, without regard to the kind of objects, as

* (one) * * (two) * * * (three) * * * * (four) * * * * * (five), etc.

This is the pure consideration and perception of numbers by themselves in their natural sequence, — the perception of pure number.

Such a clear, certain knowledge of the series of numbers up to ten should be developed in the child in the age of childhood. But the names of numbers should by no means be spoken before the child as empty, dead sounds, and repeated by him in a mechanical, therefore also a dead and empty, manner, when it would otherwise be quite as likely that the child would say two, four, seven, or eight, one, five, two, if the human mind did not at last throw off through its own strength every thing unnatural.

The child should for a long time never utter the words signifying number without looking at objects which have actually been counted and are being counted; as otherwise these words are void and meaningless to him.

In and by the accomplishment of the development of the conception of number there is at the same time given an example of the way in which the child rises, and in accordance with what laws it rises, from the perception of the most isolated thing to more general and to the most general conception.

Section 39.

With what richness, fulness, and freshness of the inner and outer life do we now find the rightly guided, genuinely fostered, truly protected child in the last period of his childhood, the time of his exit from childhood, and entrance into boyhood! Where is there an object of future information and future teaching which does not germinate in childhood?

Language and Nature lie open before the child. The properties of number, form, and size, the knowledge of space, the nature of powers, the effects of material, begin to disclose themselves to him. Color, rhythm, tone, and figure come forward at the budding-point and in their individual value. The child begins already to distinguish with precision Nature and the world of art, and looks with certainty upon the outer world as separate from himself. The feeling of an inner world of his own now develops within him. Nevertheless we have not yet touched upon, we have not yet noticed, one whole side of the life of the child not yet entered into boyhood. It is that of accompanying father and mother, brother and sister, in their domestic employments, in their business employments.

Section 40.

I look out of doors, and the scarcely two-years-old child of a day-laborer is leading his father's horse: the father has placed the bridle in the child's hand. The child moves on quietly and steadily before the horse, and looks round frequently to see if the horse is following. True, the father holds the curb-rein in his hand; still the child is firmly convinced that he is leading the horse, and that the horse must follow him. For see, the father stops to speak to an acquaintance, and of course the horse stops also; but the child, looking on this as wilfulness on the part of the horse, pulls the bridle with all his strength to make it go on.

My neighbor's little boy, scarcely three years old, is taking care of his mother's goslings near my garden hedge. Small is the space in which he may allow the lively little creatures to seek their food. They escape from the little herdsman, who is perhaps seeking food for his mind in another way. They come into the road, where they are exposed to many dangers. The mother sees this, and calls to the child, "Be careful, my son." The little boy says to his mother

crossly, for he must have been often disturbed in his employments by the goslings' repeated attempts for freedom, "Mother, do you think it is not hard to take care of goslings?"

Who can prove, establish, authenticate, the present and future developments which proceed from the child's thus taking a part in the parental employments? And yet more might proceed if parents and others noticed these developments, and utilized them for the information and teaching of their children.

See here the maturing child of the gardener. The latter is weeding; the child wishes to help, and is taught to distinguish hemlock-parsely from parsely. Then the different gloss on the surface of the leaf and the different odor are noticed.

There the forester's son accompanies him to the enclosure which has been sowed over. Every thing looks green. The child thinks he sees nothing but tiny firs; but the father tells him that one kind is cypress-spurge, and teaches him to know the differing character of each.

There the father takes aim and shoots: he hits the mark, and shows the attentive child that three points (the sights) must always lie in one direction. He shows him that, in order to turn the barrel of the gun toward a certain point, these three points (sights) must lie in that direction, and that, when this is the case, all the other points also lie in the same line and direction.

There stands the child, and sees his father beat the glowing iron; and the father teaches him that the glow increases the malleability of the iron, but also, since the child vainly tries to stick the now glowing iron bar through the opening through which it before went so easily, makes him perceive that the heat expands the iron.

Here the father who sells by weight, and is standing near the scales, shows the child who is watching him, that the one scale always sinks when he either lays a greater quantity on it, or takes some away from the other scale; and that the scales always remain in their horizontal position, however much or little there may be in them, provided there is an equal weight in each. But the father does not show this to the child by words, which as yet have no meaning to him, but by permitting him to lay on or take off the weights himself.

Here the weaver shows the child how the pressing-down of the treadle causes a lifting of the threads, and allows the child himself to prove it.

There the calico-printer shows the child how certain liquids alter the colors, and that certain colors always change in the same way. He shows him how the design must be reversed on the form, or placed at the left, if the design is intended to be at the right.

Here the merchant teaches his son that the coffee is a shelled fruit, the seed of a plant; and utilizes the first opportunity to show him the coffee-beans. He shows him, the next time they go out for a walk, the place and manner of growth of the caraway, the poppy, the millet, the hemp, etc., all of which, as long, round, gray, yellow, and whitish grains, are objects of trade.

The miner, the smith, the merchant, the dealer in iron and metal, teach their children to distinguish between weight and gravity. A pound of lead and a pound of chalk have equal weight; but the gravity of the lead is greater than that of chalk, iron, etc.

Here the ropemaker shows his child how the turning of the single threads of flax or hemp on the reel, at a considerable distance from one another, twines them together in a whole.

The fisherman, setting his net in the current of the flowing water, teaches his son who accompanies him, that the fish, when seeking their food, swim up the stream.

The son of the joiner, of the carpenter, of the cooper, of the wheelwright, etc., acquires by repeated observation and action, accompanied by the instructive words of his father, a clear idea of the plane, auger, and chisel. The father tells him that the material for these tools is furnished partly by the tree, by the mountain, the stone; that the smelting first refines the iron, and the smith works it into this form; and that this smith, on account of the different tools he prepares, is called a tool-smith. The joiner, etc., evidently teaches his son who is eager for knowledge, that not every kind of wood is suitable for his tools; not fir and pine, but beech, maple, or birch; not the wood of trees with needles, but that of leafy trees or fruit-trees. And the father employs the next walk with his son, not only to teach him to know how to distinguish the leafy and needle trees, but also to teach him to easily give the right names to beech, Scotch fir, and poplar.

The bark-peeler teaches his child who wishes to help him in his work, about the use and employment of the oak and poplar bark, and shows it to him the next time that he (the father) buys a piece of sole-leather from the tanner in the city.

So the natural child, healthy in mind and body, leads the true father; and the careful father leads the child, who is ever seeking

for activity of body and mind, from the country to the city, from Nature to Art, and, reversed, from trade to agriculture and horticulture. And although the starting-point, the moving cause, is different, yet it is possible to each of them to learn to know the sphere of knowledge of others from his own, and to connect it with his own. Every business and every trade, every calling of the father, affords a starting-point for the acquisition of all human knowledge.

To what an amount of knowledge can the farmer's child be led merely by his father's wagon and plough! the miller's son by his father's mill! the merchant's son by the raw or manufactured natural productions which are objects of his father's trade!

What a wealth of knowledge can be developed from the different employments of the manufacturer! what insights and discoveries, which in the later school-life of the children can be given only with pains and difficulty! These are the results of the domestic and family life of the employed and unemployed, of the observed and unobserved child.

The child — your child, fathers — anticipates this so deeply, so vividly, so truly, that he hangs about you wherever you stay, wherever you go, whatever you do. Do not unkindly repulse him, do not push him from you, do not be impatient with his frequent questions! With every hard, repellent, rebuffing word, you destroy a bud, a sprout, on his tree of life. But do not answer him much by words when he can without words answer himself; for it is of course easier to hear the answer of another, perhaps only to half hear and half understand, than to seek to find it out for one's self. But the answer partially found by himself is more to the child, and of more importance to him, than half hearing and half understanding it: this last causes indolence of thought and mind. Therefore do not always answer your children's questions directly, but, *as soon as they have sufficient power and experience*, give them the conditions to find the answer by their insight.

Let us parents, especially us fathers (for to us is confided the special tendance and guidance of the child at this age, — the child who is maturing into boyhood), rest on the perception of what the fulfilment of our fatherly duties, our guidance of the children, gives to us; let us experience the joys which it gives to us! It is not possible that a higher joy, a higher satisfaction, should come to us in any way than that of the guidance of our children, of the life with our children: therefore let us live with our children. It is inconceivable

how we can expect and seek higher joy, greater profit, more complete satisfaction of our noblest desires elsewhere than in employing ourselves with our children; more recreation than in the circle of our family, where we can create joy for ourselves in more than twofold respects!

Yet could we but see the quiet father in his simple civic relations, in his happy, joyous family, representing what has been only partially stated here, the truth of the statement would then deeply impress us. And his rule of conduct can be expressed in a few words: "I consider it to be the first and most important part of the education of children to lead them early to think."

It appears to him so natural, and so much a matter of course, to accustom the children to early habits of work and activity, as to need no words on the subject. And, besides, will not the child who is led to think be at the same time led to industry and activity, to domestic and civic virtues?

These words are a kernel from which unfolds a whole, shady, evergreen tree of life, full of fragrant blossoms, and sound, ripe fruit. Let us hear and observe the manner in which we allow our children to wander around us without work, and therefore dead.

Section 41.

But—it is hard; yet it is true: if we only cast an examining, searching glance upon and within ourselves in our intercourse with our children, we must confess that no more is said than is true—we are dead, and what surrounds us is dead to us. We are empty of all knowledge for our children. Almost every thing we say is hollow and empty, without meaning and without life. Only in few rare cases, when perception of Nature and life lie at the foundation of our speech, do we enjoy the life of it.

Therefore let us hasten; let us give life to ourselves, to our children; let us through them give meaning to our speech, and life to the objects surrounding us! Therefore let us live with them; let us permit them to live with us; thus shall we receive through them all that we need.

Our words, our conversation in social life, are dead, are empty husks, puppets without life, coin without value, for they lack the perception of the inner; they lack contents. They are evil spirits, because they have no body nor substance. Our surroundings are

dead; objects are masses: they depress instead of elevating; for they lack the vivifying word that gives sense and meaning.

We do not feel and discover the sense of our conversation, for it consists of ideas learned from the outside, at the foundation of which are neither perception nor formation. Therefore they do not cause any perception, formation, or life, for they have not come, and do not come, from life.

Our conversation resembles the book from which we have learned it by rote, though only at third or fourth hand. We do not see, nor can we form, what we speak of. That is why our conversation is so empty. Our inner and outer life and that of our children is so poor, because our talk is not born of a life rich in seeing and creating inwardly and outwardly, because our talk and our words lack the contemplation of the thing which they indicate. Therefore we indeed hear the sound, but we receive no image: we hear the noise, but we see no action.

Section 42.

Fathers, parents, come, let our children supply us with what we lack. The all-vivifying, all-forming power of child-life that we no longer possess, let us receive again from them.

Let us learn from our children; let us give ear to the gentle monitions of their life, the quiet demands of their intellect. Let us live with our children: so shall the lives of our children bring peace and joy to us; so shall we begin to be and to become wise.

Section 43.

The objects of the outer world become most intimately connected with the word, and by the word again most intimately connected with the human being at the stage of his development which we have been observing, and the perception and consideration of which we have brought forward.

This stage is therefore pre-eminently the stage of development for man's capacity for speech. On that account it was so indispensable to connect the precise, clear word with every action of the child, and to clearly designate each action. Every object, every thing, becomes such for the child by the word. Before the word was given, the thing had no existence for the child, though his outer eye seemed to perceive it. A word created, as it were, the thing for the child:

therefore word and thing seem to be and are one as much as pith and stem, as branch and twig; and notwithstanding this inner connection of the object with the word, and through the word with man at this stage of the development of man, each object is quite distinct from another, each object and each whole is again quite unseparated in its parts, — a fact which cannot be clearly enough perceived, or noticed with sufficient accuracy by parents and educators. But the destiny of man and of things makes quite a different requisition: man is not only to view each thing as an undivided whole; but he is also to view it as capable of being separated into parts for the representation of a joint aim. He is not only to recognize and view it as a whole, existing for itself as a unity and an individuality, but he is to recognize and view each again as a part of a respectively greater and higher totality for the representation of a higher common aim. Not only the outer relations and connections of each thing, but its inner references, its inner union with that which is outwardly separate from it, are to be recognized and established.

Section 44.

Yet the totality of that which forms the outer world to man cannot be recognized as such in its unity, but again only through the knowledge of the individual being, of the peculiar nature of each individual thing in its substantiality and personality.

But man recognizes with difficulty the inner nature of each thing when it is brought too close to him inwardly and outwardly, and the difficulty is increased in the measure that the thing is brought too near him outwardly and inwardly, that it stands too near him in both respects. The misunderstanding between parents and child within the family circle, etc., gives frequent and speaking proofs of this fact. For that reason it is generally so difficult for man to recognize himself. An outward separation, on the contrary, frequently brings forth inner union, inner discovery and recognition. So, alas! man knows many strangers and strange objects, strange times, strange persons, better than his own neighborhood, his own time, better than he knows himself. If man desires truly to know himself, he must represent himself outwardly; must, as it were, place himself opposite to himself. If, now, man is to rightly recognize his destiny conformably to the nature of each thing in the outer world around him, if he is by means of each thing to

rightly recognize himself, there must be for him after the age of childhood a new stage, opposite in its nature to the preceding one, uniting man and object; outwardly opposing, but inwardly uniting, man and object.

Such a stage, which brings the objects inwardly near to man by separating word and object, recognizes object and word each as something different from the other, distinct from it, yet uniting with it. This stage is that in which language comes in as something substantial, and existing for itself. This is the stage now following.

Man emerges from the stage of childhood into the stage of boyhood with the separation of the word from the thing, and the thing from the word; with the separation of the speech from the speaker, and the reverse; with the even later embodying of speech by sign and writing, and the contemplation of speech as something embodied.

This is the stage in which man by his power brings the outward near to himself, and assimilates it.

Part III.

MAN AS A BOY.

Section 45.

As the former stage of human development, the *stage of childhood*, was pre-eminently that *of life*, of mere living, as it was the stage at which to make the internal external, so the present, the *boy-stage*, is pre-eminently the stage to make the external internal, the *stage of learning*.

On the part of the parents and educators the baby-stage was pre-eminently the stage of *fostering*. The following space of time, which claims man predominantly as a unity and for unity, is that of predominating *education*. The just indicated stage of boyhood claims man predominantly in single references and for individuals, in order later to trace back their inner unity. The inner directions in which the individualities stand among themselves are to be sought out and proved.

To consider and treat the individuals by themselves, and in reference to their inner relations to each other, is the province and nature of instruction. And so the boy-time is predominantly the time of *instruction*.

The business of developing and cultivating man in boyhood takes place as *instruction*, not only according to the nature of the human being, but predominantly according to the precise, fixed, and clear *laws* lying in the nature of things, especially according to those laws to which man and object are alike subject; or, to speak more precisely, not so much in regard to the way in which the general eternal law is expressed with peculiar reference to man, as in regard to the way in which it is expressed with peculiar reference to every object besides man, and in reference to the way it is expressed in man and object mutually: therefore the business of developing and cultivating man in boyhood takes place as instruction according to

fixed, precise limitations *outside* of him in this peculiar or general form. According to this, instruction can and must take place only with knowledge, insight, circumspection, inspection, and consciousness.

Such a procedure is called *school* in the widest sense of the word.

It is therefore school when man is brought to and attains to the knowledge of the objects outside of himself, and of their nature according to the special laws of these objects, and to the general laws which rule all; when man, by the bringing forward of the outer, the particular, the individual, is brought to and attains to the knowledge of the inner, the general, the unity. Therefore man as a boy becomes at once a *scholar*.

With the stage of boyhood comes also for man the beginning of school, whether it be in or out of the house, by the father, by the members of the family, or by a teacher.

By school, is therefore understood, neither the schoolroom nor the school-teaching, but the conscious communication of knowledge for an aim, and in an inner coherence of which the teacher is conscious.

Section 46.

The development and cultivation of man to attain his destiny, to fulfil his vocation, is (as it has appeared and continues to appear on all sides) a perpetual, uninterruptedly continuous, unseparated whole, always rising from one stage to another. From the feeling of community awakened in the baby develops in the child the impulse, the inclination. This impulse and inclination tend to form the intellect and heart, and generate in the boy activity of mind and will.

The principal aim, the principal point of reference, in the guidance of the boy in the instruction given to him, as well as in the school, is to raise the activity of the will to firmness of will, and so to vivify and form a clear, vigorous, firm, and enduring will, to train up and represent a pure humanity.

Section 47.

Will is the activity of the spirit always consciously proceeding from a definite point in a definite direction, to a definite, conscious aim in harmony with the whole nature of man.

In this statement is said and determined all which parents and

educator, teacher and school, should give and be to the boy, looking upon him in this point of view.

The starting-point of all the boy's activity of spirit should be vigorous and healthy; the fount from which his activity flows should be pure, clear, and never stagnant; the direction should be simple and definite; the aim, assured, firm, and conscious, having life in itself in accordance with its nature, developing life, nourishing, rejuvenating, elevating, and ennobling life, worthy of the efforts of man, worthy of his calling and of his destiny, worthy of his nature, and developing and representing his nature.

In order, therefore, to raise the natural activity of the will of the boy to true, genuine firmness of will, all his activities, all his will, must proceed from and refer to the development, the improvement, and representation of the inner. Example and words, instruction, later teaching and example, are the means by which this object may be attained; not examples alone, and not words alone. Not example alone; for example is single, individual, receiving its generality and applicability by the word. Not word alone; for word is general, spiritual, often ambiguous, receiving perceptibility, significance, and existence through example.

But example and word, instruction and example, cannot effect this alone, but only in conjunction with a pure, good heart; and the education of childhood works to this end.

Therefore the training of the boys rests only on you; therefore activity of will proceeds from activity of heart and mind; firmness of will, from firmness of heart and mind; and, where the activity is wanting, the firmness is difficult to attain.

Section 48.

But the expression of a good, pure heart, a thoughtful, pure mind, is, as it bears a unity in itself, the fervent, the yearning effort to find an inner necessary unity also for the outwardly separated things of which he sees so many around him, and also to find for them a spiritually uniting, and an all-vivifying, spiritual bond and law, such as it feels in itself, a bond and law whereby they will receive at least the significance of life.

This eager desire is fulfilled to man in the stage of childhood by finding himself in complete possession of animated play; since he, by this play, is placed in the centre of all things. All things are placed

only in reference to him, to his life. Yet the family life, above all, gives the full satisfaction of this desire; only the family life gives this development and perfecting of a good heart and of a thoughtful, pure mind in their genuine activity and full vigor, which is beyond all comparison important for each stage of formation, even for the whole life of man.

Since, now, that uniting thought is the primary condition of all genuine human development and training to perfection, and since every separating thought disturbs the pure, human development, so even as a child, man refers every thing to the family life, sees every thing only through the family, in the mirror and form of the family life, as childhood clearly shows.

The life of his own family is thus to the child an outward thing, and it becomes to him a model life. Parents should always consider that the child would like to represent it as it seems to him in its purity, its harmony, its efficacy.

Section 49.

But in the family the child sees his parents and other members of the family, and sees the adults create, produce, do work in life and in the relations which concern his family. And so the child, also, at this stage would himself like to represent what he sees. He would like, and tries, to represent all that he sees his parents and other adults do, create, represent, and perform; all of which he recognizes the possibility and manner of representation by human powers and by members of humanity.

What before was in the child action for the sake of the activity is in the boy activity for the sake of the work, of the result. The child's impulse to activity has developed in the boy into an impulse for formation: this fact solves the problem of the whole outer life, of the outward manifestations of boy-life.

How eagerly at first does the boy or girl at this age share the work of father or mother, not the sportive and easy — no, no — the fatiguing portions of the work, — those which require strength and effort!

Here be cautious, here be careful and thoughtful, parents. You may here at one stroke destroy, at least for a long time, your children's impulse to activity and formation, if you reject the help of your children as childish, useless, even, perhaps, as hindering and intrusive.

Do not allow yourself to be misled by the press of business: guard yourself from saying, "Go away! you only hinder me"; or "I must hurry: let me do it quickly alone!"

The inner activity of boy and girl becomes thus disturbed: they see themselves put out from the whole, with which they felt themselves entirely one; their power is excited; they see themselves alone; they do not know how to begin any thing with the aroused power, which is therefore wearisome and oppressive; they become fretful and idle.

This rejection by the parents need scarcely happen three times to prevent the child from coming forward again to help to share in any work. He stands around now, fretful and *ennuyé*, even if he now sees the parents busy about work in which he could take part. And who has not, later, heard from the parents the following complaint made about children who had been so treated: "When the boy, the girl, was small and could not help at all, it was busy with every thing; now that it has knowledge and power, it will do nothing"?

See, parents! the first impulse to activity, the first desire for formation, comes out to man conformably to the nature of the spirit working within him, as yet unconsciously and unrecognized, without his help, even against his will, as man in later life can still perceive in himself. If, now, there comes up to man, especially in youth, an outward hindrance of this inner summons to activity, and particularly to formation, creation, and representation, which is always connected with bodily effort, — such a hindrance as the will of the parents, which cannot be set aside, — his power is immediately weakened, and, if this experience is frequently repeated, withdraws wholly into the background, and subsides into inactivity.

The child thus disturbed neither asks nor considers whether or why his help is allowable at one time, and not at another; he selects that which is in conformity with his physical nature. He the more readily and willingly gives up this activity as he seems to be forced to it by the will of his parents.

The child becomes idle; that is, his body is no longer interpenetrated by spirit and life: it becomes to him a burden which he must bear, whereas before the feeling of power did not permit him to consider his body as such, but only as the vigorous bearer of the interpenetrating power.

Therefore, parents, if you wish for help from your children later and at a convenient time, nourish early in them the impulse of

activity, and, especially at the stage of boyhood, the impulse to formation, even though it should cost you some self-command, some sacrifice. It will later repay you a hundred-fold, like good fruit in good ground.

Strengthen, develop, confirm, this impulse; give your child the highest which he now needs; permit him to put his strength into your work, which, being yours, is especially dear to him, so that he may acquire not only a consciousness, but a measure, of his power.

If the earlier activity was only imitation of the domestic life, the present action is participation in domestic affairs, — lifting, pulling, carrying, digging, splitting. The boy will exercise, weigh, and measure his strength in all these acts, that his body may be strengthened, his power increased, and that he may obtain a measure of his power. The son accompanies his father everywhere, — to the field and into the garden, to the workshop and the printing-office, to the employments of the forest and meadow, in the care of the domestic animals and the manufacture of the smaller articles of house-furniture, to the wood-sawing, wood-splitting, and wood-piling, to all the different employments of the father, whatever his business may be. Question after question presses forth from the knowledge-seeking mind of the boy, — how? why? by what means? when? wherefore? of what? for what? And every answer which is only measurably satisfying opens to the boy a new world. Speech appears to him everywhere as an intermediation, and therefore he perceives its absoluteness.

The healthy boy of this age, who has been simply and naturally trained in childhood, never avoids a difficulty, never goes round a hindrance: no, he seeks it out, he overcomes it. "Let it lie," calls the vigorous youngster to his father, who wishes to remove a piece of wood from the boy's path, — "let it lie: I can get over it!"

With difficulty does the boy get over the first time; but he has got over unassisted; strength and courage are increased in him; he goes back, climbs again over the obstruction, and soon gets over it as easily as if nothing lay in the way. As activity gave pleasure to the child, so action gives pleasure to the boy. Hence the phenomena of the daring, adventurous power of boyhood, the plunging into holes and clefts, the climbing of trees and hills, the searching for the high and the deep, the rambling in forests and fields.

Easy is the most difficult, without peril is the most adventurous;

for the prompting to it proceeds from the innermost nature, the mind, the will.

But it is not alone the weighing and proving, exercising and measuring the power, which attracts the boy even at this age toward height and depth, width and breadth; but it is especially the peculiarity and need of his now unfolding innermost life to survey the manifold, to see the isolated in a whole, especially to bring near that which is distant, to receive into himself the distance, the multiplicity, the whole. He strives to extend his view, his range of vision, from stage to stage.

The climbing of a new tree is for the boy the discovery of a new world; the outlook from it shows every thing quite differently from our usual crowded and shifting side-view. If we could recall the feelings that expand both heart and soul which we had in our boyhood when the narrowing limits of the surroundings sank before our extended gaze, we should not, when all lies so distinctly before the boy, call to him so coldly, "Climb down, you will fall!"

Not only by moving and standing does one learn to move and stand; not only by moving and standing, sitting and creeping, does one protect one's self from a fall, but also by looking around and from above. And how wholly different is even that to which we are most accustomed, when we look upon it from above!

Should we not early procure for our boy this elevation of spirit and mind? Shall he not in the clear heights clear his thoughts, and expand heart and mind, by his gaze into the distance?

"But the boy is so adventurous I am never free from anxiety about him."

The boy who has been brought up in the calm way suited to the constant development of his strength will always make only a little more demand upon his strength than it has proved capable of meeting, and so he will pass through all these dangers as if guided by a protecting genius; while another, not knowing his own strength and powers, ventures to do things for which he lacks, though ever so slightly, the skilled strength required, and gets into danger even where the most cautious would anticipate none.

Those boys are always the most rashly adventurous who, without constantly practised strength, have all at once an influx of strength, and at the same time the opportunity to use it. They will then, especially if others are observing them, get into danger.

Not less developing and full of significance is the boy's inclination

to plunge into hollows and clefts, to ramble in the shady grove and in the gloomy forest. It is the effort to seek and find what is yet undiscovered, the effort to bring into the light and close to himself that which abides in gloom and shadows, and to appropriate it.

The boy brings back with him from such wanderings a rich booty of unfamiliar stones and plants and animals which dwell in darkness and retirement, — worms, bugs, spiders, lizards.

And "What is this? what is its name?" etc., are the questions to which the boy seeks an answer on his return. With each word his world becomes richer, the outward world clearer to him. Only, of course, you must not call to the boy when he is approaching, "Fie, throw that away, that is horrid!" or, "Drop that, it will bite you."

If the child obeys, he has also thrown away an essential part of his human power, and later you may say to him in vain, "See, that is a harmless little creature." His own understanding and reason may say to him in vain the same thing; his gaze is turned away, and a sum of knowledge is lost to him; while the boy scarcely six years old will tell you things about the wonderful construction of a bug, and the peculiar use of its limbs, which up to that time had passed all unnoticed before your eyes. You may warn him to be careful about grasping unfamiliar creatures, but not with solicitude.

But the genuine, vigorous boy of this age is by no means always on the heights, by no means always in the depths and the gloom. The same effort which draws him to hill and valley, namely, the effort to look around, to look over, and to look into things, retains its hold of him also on the plain. See, there he is making a garden under the hedge, near the fence of his father's garden; there he represents the course of a stream by his furrows and ditches; there he closely contemplates and looks into the effect of the fall or of the pressure of the water on his little water-wheel. Here he observes the property of swimming of a little piece of wood, or of a piece of porous bark on the water he has dammed up to form a little pond. A boy of this age is especially fond of employing himself with the clear, running, easily movable water, in which the boy who would like to have a clear idea of himself sees the image of his soul as in a mirror; he also likes well to employ himself with plastic materials (sand, clay). One might say that these employments are an element of his life; for he seeks now, because of sensations previously gained of power over material, to gain mastery over these.

Every thing must subserve his impulse toward formation; there

in the heap of earth he makes a cellar, a cave; upon it a garden, a bench.

Boards, boughs, slats, and poles must be put together to form a hut or house; the deeply-fallen snow must be rolled up to form the walls and ramparts of a fort; and the rough stones on a hill must be grouped together to make a castle — all in the thought, spirit, and effort of man in his boyhood, in the thought and spirit of union and appropriation.

See there the two scarcely seven-years-old boys, how they, putting their arms round each other, peacefully and trustfully consulting, wander down the yard! they wish to get some tools in order to build, in a dark grove behind the house, a hut with bench and table, a seat from whence their eyes can overlook the whole valley at one glance, and see it as a beautiful whole composed of parts.

So the uniting but also self-resting thought unites all that comes near it which is suited to its needs and inner conditions, — unites stones and men in a mutual aim for a mutual work. And thus each soon forms his own peculiar world; for the feeling that he has *strength of his own* soon also requires and conditions the possession of a *space of his own* and *material of his own*, which belong exclusively to him. Whether his kingdom, his province, his estate, as it were, be a corner of the yard, of the house, or of the room; whether it be the space of a box or be in a bureau; or whether it be a hollow, a hut, a garden, — he, the boy, at this age must also have an outward point of reference and union of his activity, which is best provided and chosen by himself.

If the space to be filled is extended, if the province to be ruled is large, if the whole to be represented is composed of many parts, then is shown the brotherly union of those who are like-minded. And if those who are like-minded meet in equal efforts, and put their hearts into it, either the work already begun is extended, or the individual work is begun anew as a general work.

Would you parents, you trainers of children, you educators, see in miniature, in a picture as it were, what is here indicated? Look with me into this educational room and into this circle of more than eight boys of from seven to ten years old.

On the large table in the much used room stands a box with building-bricks (blocks in the form and relation of the mason's bricks, each length about one-sixth of the actual size, of the most beautiful and multiform material which can be furnished to the growing

power of the boy as means of representation): sand or saw-dust have also their place in the room; and the last walk into the beautiful fir-wood has given a rich supply of beautiful green moss.

It is the time for free work, and each has now begun his work for himself. There in that corner stands, quite hidden, a little chapel; cross and altar indicate the spirit of the idea: it is the work of a little quiet boy. There on the chair two boys have undertaken together a considerably larger work: it is a building of many stories, which looks from the chair, as from a hill, into the valley. But what has that boy built so quietly under the table? It is a green hill, on which is enthroned an old ruined citadel. Under the hands of others a little village has extended into the plain.

Now each has finished his work: each now looks at it, at the work of the others, and at the others. To each comes the thought and wish to unite the isolated building, to form a whole, and scarcely is the wish recognized as common to all than roads are laid in common from the village to the ruined citadel, from the citadel to the castle, from the castle to the chapel; and meadows and brooks are made between them.

Or, if you are there another time, some have made a landscape of clay; another has made a cardboard house with windows and doors; and another again has made boats of nut-shells. Each one now looks at his work: "It is good; but it stands alone." He looks also at his neighbor's work: "It would be much prettier together." And soon the house stands like a castle on the hill of the landscape; and the boats swim on the little artificial sea; and, to the delight of all, the younger brings his shepherd and sheep to graze between the hill and the lake. Now they all stand and look with satisfaction at the work of their hands.

Or down yonder, by the spring, by the brook, how busy the older boys are with their work! They have built canals and locks, and bridges and seaports, dams and mills; each boy undisturbed by the others, and not noticing their work. But now the water is to be used according to its nature; and ships glide upon it from the higher to the lower water. But after each advance there is another barrier, and each boy asserts his right while acknowledging the requirements of the others. How can the difficulties be settled? Only by agreements; and, like States, they bind themselves by strict agreements. Who can demonstrate the many-sided significance, the manifold fruits, of these boyish plays? Only one thing stands firm and sure:

these plays proceed from one thought and one spirit, — the one thought and spirit of boyhood. And the boys who played thus were good scholars, intelligent, and willing to learn, seeing and representing clearly, diligent and assiduous; and are now capable young men, with well-trained heads and hearts, quick in expedients, and dextrous in action; and some of those who thus played are capable, clear-sighted, circumspect men, and others will become so.

It is especially important for the boys at this age to prepare their own gardens for the sake of the result; for man sees there (in the garden), for the first time, the fruits proceeding from his action in an organic, necessarily limited, intellectually legitimate way, — fruits which in many ways depend upon his activity, though subject to the inner laws of the powers of Nature. This work gives many-sided and full satisfaction to the boy's life with Nature, his questions about it, and the earnest desire to know Nature, which leads him repeatedly to contemplate plants and flowers for a long time, and to observe them thoughtfully. And Nature also seems especially favorable to this desire and this employment, and to especially bless them by a fortunate result; for it seems, by a glance at the gardens of children and boys, that the plants which the boys only in some degree tend and cherish, grow and bloom with remarkable health and freshness: it seems, indeed, that the plants and flowers which the boys watch and tend with especial love, live with them, as it were, and bloom with especial brightness and joyousness.

If the boy cannot have any garden of his own to tend, he should at least own a couple of plants in boxes or flower-pots, and these plants should not be rare, hard to raise, or double; no! they should be easily grown, common plants, such as have an abundance of leaves and flowers.

The child or boy who has tended or protected an outer life, even if of a very inferior degree, is more easily led to the tendance and care of his own life. And the boy's desire to observe living, natural objects, beetles, butterflies, swallows, is also satisfied by the care of plants, as such creatures like to come near the plant-world.

But all the plays and employments of boys of this age are by no means only representations of objects and things: many plays are pre-eminently exercises and tests of strength; many have no other aim than that of showing strength.

Yet the play of this age has always a peculiar character, corresponding to the inner life of the boy. As in the previous space of

time, that of childhood, *activity* alone was the object of the play, so now its object is a definite conscious aim; it is *representation* as such, the act of representing: and this character of the free, boyish plays, is more and more perfected in his advancing years. So with all plays of bodily movement.—the plays of running, wrestling, boxing, ball-plays, goal, fighting and hunting plays, etc.

The feeling of certain, sure strength, the feeling of heightening and increasing this strength in himself and his playmates, is what fills the boy with such all-pervading, jubilant pleasure in these plays. But it is by no means only the bodily strength which here receives such great and strengthening nourishment, but the spiritual, the moral strength appears to be heightened, increased, made definite and sure by all these plays; so that when the question comes up which side the scale shall turn, whether on the bodily or spiritual side, the overweight will hardly be on the side of the body. Justice, moderation, self-command, veracity, honesty, brotherliness, and also strict impartiality will spring up, like beautiful flowers of heart, mind, and firm will; and who, when he approaches a circle of such playing boys, does not perceive the fragrance of these flowers? The beautifully colored, though perhaps less fragrant flowers, courage, endurance, resolution, presence of mind, severe criticism of and withdrawal from pleasant indolence, may form no part of the bouquet.

Whoever desires to inspire a fresh, refreshing breath of life, should visit the playground of such boys.

But more delicate, fragrant blossoms bloom, and the courageous, free boy spares them, as the courageous horse does the child in the path of his rapid course. These delicate flowers, resembling the violet and snowdrop, are sparing, tolerating, cherishing, encouraging towards those who are, not through their own fault, weaker, more delicate, or younger; and fairness towards those who are not yet familiar with the play.

Would that all would consider this who only just tolerate giving boy-plays a place in the education of boys!

True, many a word is rough, and many an action saucy; but the strength exists previously to the cultivated strength. There must be the sensation of strength before the strength can manifest itself as cultivated. Sharp, clear, and penetrating are the boy's eye, gaze, and sense for the recognition of the inner; and therefore sharp and precise, even hard and rough, is his judgment toward those equally endowed with judgment and strength, or who, at least, act as if they were thus endowed.

Each town should have a play-place for its boy-world that is common to all. Glorious would be the fruits which would proceed therefrom for the whole community; for the plays at this stage of development are held in common whenever it is possible, thus developing the sensation of community, the laws and requirements of the community.

The boy seeks to see himself in his playmates, to feel himself in them, to measure himself by them, to recognize and find himself by means of them. So the plays directly influence and form the boy for his life, awaken and nourish many civic and moral virtues.

Yet seasons and circumstances do not always permit the boy, free from the duties of home and school, to exercise and develop his strength in the open air; and the boy should never be absolutely inactive: therefore all kinds of other outward employments and representations which are connected with house and room, especially what is called mechanical work, work with paper, cardboard, moulding, etc., make so essential a part of the action and guidance of the boy at this age, and are so important for him.

Yet there is still in man an effort, an earnest desire, a demand of the mind, which is not satisfied by all the outward employments and activity. All which outward employment and activity give to man at this stage is not lasting enough for him; is not lasting enough for what he seeks and needs in education suited to his nature; the present, with all its fulness and all its richness, cannot satisfy him.

From the fact that something is in the present, he recognizes that something was in the past. He would like to know of what existed before him. He would like to know the past cause of what is present: indeed, he wishes that what has remained from the old time should tell him of itself, of the foundation of its existence, of that old time.

Who does not remember clearly the earnest desire of his boyhood, especially of his more matured boyhood, which clearly and loudly expressed itself in his mind when he looked at old ruined walls, old towers, even only buildings, also when he looked at old monuments and columns on the heights and by the wayside, that others would tell him of these objects, of their time, and of their origin?

Who has not then observed in himself a dim, indefinite feeling, as if these objects could and would some time tell him of themselves and of their times?

And who, according to his experience, can tell him of these

things but those who were in existence before him, — his elders? He earnestly desires that they should tell him of these things; and thus develops, in a boy of this age, the need of and strong desire for narrative, for tales, for all kinds of stories, and later, for accounts of historical events.

This urgent desire, especially at first, is uncommonly great at this age; so great, that, when it is not satisfied by others, the boys seek its satisfaction from each other, especially at the seasons and on the days of rest; that is, when the bodily employments and affairs of the day are ended.

Who has not seen, and who has not been filled with anxiety by seeing, how a circle of boys at this age collect around the one whom they have chosen for their story-teller because of his good memory and vivid imagination; how they listen with strained attention; how his story fulfils the wish of their life, and confirms act, deed, and judgment by action; in a word, brings before them example and word in union with their inner nature! But the present, in which the boy lives, contains still much which man in this stage of development cannot explain to himself, much as he would like to do so; much which seems to him dumb, and which he would like to have speak; much which seems dead to him, and which he wishes should be living and animated.

He wishes others to undertake this explanation, to make him hear the quiet speech of the objects which to him are silent, to give speech to silent objects; he wishes that the inner, living coherence of things which his innermost nature anticipates should be clearly expressed to him by word and speech.

But it is not always possible, and sometimes it is quite impossible, for these others to fulfil the boy's wish, and so there develops in him the need and earnest desire for fables and legends, both of which attribute speech and reason to speechless objects, — the one within, the other without, the limits of human relations, and human, earthly phenomena.

This, also, has certainly been remarked by every one who has remarked the life of boys of this age with somewhat deep and comprehensive attention. So, if here also this need is not and can not be satisfied by his elders, the boy of his own accord falls upon the invention and representation of legends and fables, and improves upon them either only in his own mind, or also for the benefit of companions of his own age, whom he delights with these stories.

These legends and stories, then, very expressively demonstrate to the observer what is going on in the deep mind of the young story-teller, though doubtless only unconsciously to himself.

He wishes to hear expressed by others what he himself feels, what lives in him, and what he yet lacks the language to express himself.

What does the boy's mind anticipate, what brings joy and pleasure to his swelling heart, like the feeling of strength and of the spring-time of his life, which he desires to put into words? But he feels himself too young for this. He seeks for words, and, since he cannot yet find such in himself, he is greatly delighted to find them outside of himself, in sentences, and especially in song.

Does not the joyous, animated boy at this stage like to sing? Does he not first feel himself truly living in song? Is it not the feeling of a growing strength which makes the animating song ring out so loudly from his lips and from his healthy throat as he rambles from the valley to the hill, or from hill to hill?

The boy is enchained by the urgent desire to have a clear idea of himself. So we saw him by the clear, pure, running, still or rippling water. The water always draws him back to it in his plays, because he sees in it himself, the image of his soul, and hopes by it to obtain a clear idea of his spiritual being.

What the water is in the brook and lake, what the pure air and clear distance from the top of the hill are for the soul of the boy, that his play is to him, — a mirror of the combat of life awaiting him in the future: therefore, in order to strengthen him for this combat, man in his later youth, and even in his boyhood, seeks out obstructions, difficulty, and combat in his play.

The boy is repeatedly seized with the renewed desire to obtain knowledge of ancient times and of Nature, at the sight of flowers, old walls, and fallen arches. The earnest desire to represent what makes his mind and heart swell attracts him to song; and so it is certain that very many of the outer phenomena, very much of the behavior and actions of the boy, have an inner and spiritual significance, and indicate his spiritual life and strivings, and are therefore symbolic.

How wholesome it would be for parents and child, for their present and future, if the parents believed in this symbolism of this stage of child-life and boy-life! If parents would observe the life of their children in this respect, what a new, living bond would unite parents and child! what a new thread of life would be drawn between their present and their future life!

Section 50.

Such is the pure boy-life of this age.

If we now look upon this presentation of the inner and outer pure life of boys and children, which blesses man where a guidance and education of children and boys suited to the human nature and to the human being predominates, and, indeed, in greater beauty and fulness and animation than is here represented; if we now look from this pure life of children and boys on their life as it, alas! not seldom shows itself to us actually, though only partially; if we look especially into the childlike, brotherly, domestic, active, and busy life of the child and boy as a scholar and playmate, — we must frankly confess the latter differs in many respects from the former; that in the latter we meet with self-will, defiance, love of ease, spiritual and bodily supineness and indolence, frivolity and self-conceit, positiveness and desire to rule, unbrotherliness and unchildlikeness, emptiness and superficiality, aversion to labor and even to play, disobedience and profanity (forgetfulness of God), etc.

If we look, if we seek, now for the spring of these and of the many other faults which appear in the life of the child and the boy which can be by no means denied, a twofold cause appears: first, completely neglected development of the different sides of the human being, then the early faulty direction, the early faulty unnatural stages of development, and distortion of the originally good powers, qualities, and efforts of man by wilful, lawless interference in the original, legitimate, and necessary course of development of the human being.

Section 51.

For indeed the nature of man is in itself good, and there are in man qualities and efforts good in themselves. Man is by no means bad in himself, and his qualities are in themselves not bad, and still less are they evil, if one does not call evil, bad, and erroneous as such and in its properties and results the *finite, corporeal, transitory*, and *bodily*, which has its inevitable foundation and its existence in the appearance of the eternal in the temporal and as temporal, of the one in the individual and as individual, in the destiny of man to consciousness, reason, and freedom, and what necessarily follows, that man must be able to fail in order to be good and virtuous, that he must be able to become a slave in order to be truly free.

Whoever is to do that which is divine and eternal with self-determination and freedom must be able and permitted to do that which is earthly and finite.

Since God wished to make himself known in the finite, it could be done only by means of the finite and transitory.

Whoever, therefore, calls the temporal, individual, finite, corporeal, and bodily, bad in itself, in saying this contemns Nature in itself: indeed he, to speak truly, slanders God.

Just in the same way it is treason to humanity and man to say that he is according to his nature, that he is in himself, neither good nor bad; and it is higher treason to say that man is in himself and according to his nature bad. A man saying this annihilates God for the human being; for he annihilates the work of God, and thus the means and way of truly knowing God, and so brings the *lie*, the only fount of all evil, into the world.

Section 52.

If there is an evil which can be called evil in itself, it is this, because it is the first evil. But the lie has no existence in itself; it is already annihilated, and, as it is already annihilated according to its nature, will also be annihilated as an appearance, for man is created neither with lying nor for lying, but with and for truth. Man also does not create the lie from himself, from his nature, but man can and does create the lie just because he is created by God for truth. Man creates the lie when he does not acknowledge this for himself or for others. Man creates the lie by hindering the human being from recognizing this in himself from the pure fount of his being, and from making others acknowledge it.

The destiny of man as an earthly being is that body and soul be developed consciously and reasonably in a certain symmetry and proportion. If man could only come to a pure and clear knowledge of his being, if he, when he has come to a whole or partial knowledge and insight, were not made so strengthless, and devoid of will, by pampering and debilitating, he would of his own accord throw off all incorrectness, even the appearance of evil, which is in man and is done by man, which, as it were, clothes him, and surrounds him as a wall of deceit. All this incorrectness and wrong has its foundation merely in the disturbed relations of these two sides of man, his nature and his being.

Therefore an originally good but misshaped or displaced quality, a good effort, only repressed, misunderstood or misdirected, or misled, lies at the foundation of all appearance of incorrectness in man.

And therefore the only but never delusive means of annihilating and abolishing all incorrectness, even wickedness and evil, is to exert one's self to seek and find the original good fount of the human being, in the misshaping, disturbing, or misguiding of which lies the cause of the incorrectness, and, having found it, to nourish, foster, strengthen, and rightly guide it. Thus will the incorrectness finally disappear, though not without laborious combat, not with the original, but *with the habitual evil* in man; and this disappearance will take place so much the more quickly and surely because man himself abandons the path of incorrectness; for man prefers the right to the wrong.

Section 53.

So, selecting one point from the many, it cannot be denied that there is now extremely little actually childlike, genuinely innocent feeling, very little brotherly tolerance, very little genuine religious feeling, in the child-world and boy-world, but, on the contrary, much self-seeking, unfriendliness, especially roughness, etc., rule in these worlds. The cause thereof lies simply and only in the fact that the feeling of community is not only not early awakened, or later nourished, in the child and boy, but, on the contrary, is early disturbed, even annihilated, between parents and children.

If, therefore, genuine brotherliness, genuine childlikeness, trusting, genuinely loving, innocent feeling, peaceableness, consideration and respect for playmates and fellow-men, are again to become prevalent, they can become so only by being connected with the feeling of community abiding in each man (however much or little of it may be found), and by fostering this feeling with the greatest care. Then we also will certainly soon again possess that, the absence of which in respect to family life, human life, and religious life we now feel with the greatest pain.

Another cause of many boyish errors is the over-haste, the want of caution, the frivolousness, in a word the thoughtlessness, — that is, the acting according to an impulse quite blameless, guiltless, even praiseworthy, — which captivates all the activity of body and senses, but the consequences of satisfying which in this individual case did not show

themselves to the boy in his life-experience; and also it did not at all enter his mind to define to himself the consequences of the act, from a consideration of the thing itself.

So a boy whose mind is far from being evil powdered with pure powdered gypsum the wig of an uncle very dear to him, with real delight in his work, and without the least thought of wrong, still less without thinking that the sharp, ground stone must be injurious to the hair.

Another boy found in a great tub of water some deep round bowls of porcelain: he accidentally remarked that these bowls, falling upside down on the smooth, quiet surface of the water, gave out a ringing sound with a quickening movement. This phenomenon gave him pleasure: he tried it often, assuring himself that the bowl could not break in the deep, yielding water. This proceeding often succeeded; and, in order to make the effect more agreeable, the bowl must be dropped from greater and greater heights.

But once the bowl fell down so horizontally, and on the horizontal surface of the water, that the air compressed between the arch of the bowl and the water could not yield on any side, and yet was so pressed together that its force separated the perfectly uncracked bowl into two almost equal pieces. The little self-teaching, experimental philosopher stood concerned and troubled at the unexpected result of the highly enjoyable play.

Yet the boy is far more short-sighted, almost unbelievably short-sighted, in following his impulses.

Another boy threw stones for a long time at the small window of a neighboring building, with earnest effort to hit it, but without anticipating, or even saying to himself, that, if the stone hit the window according to his desire, the window must necessarily be broken. The stone hits; the window breaks; the boy stands rooted to the spot.

So another boy, by no means malicious, on the contrary a very good-hearted boy, who dearly loved and took care of the doves, aimed at his neighbor's beautiful dove which was on the ridge of the house, with perfect delight, and earnest effort to hit the mark, without considering, that, if the bullet hit it, the dove must inevitably fall; without the further consideration that the dove might be a mother whose young were still in need of her care. He shot; the bullet hit; the beautiful dove fell: a beautiful pair of doves were separated, and the young doves, scarcely fledged, had lost the mother who had fed and warmed them.

It is certainly a very deep truth, a non-acknowledgment of which avenges itself daily, that it is mostly the man, often the educator, who first makes the child and the boy bad. This takes place when one always attributes an evil, bad, or at least a wrong intention to all which, on the part of the boy or child, takes place either from want of knowledge, inconsiderateness, or is, indeed, the consequence of a very clear and acute perception of the right and wrong and sad him, and so from a very virtuous and praiseworthy feeling of the right.

There are, alas! still such mischievous men among the educators: they always see in the children and boys little, wicked, spiteful devils, where others would see, at worst, a jest carried too far, or the too free manifestation of their enjoyment of life. Such birds of evil, especially as educators, first make guilty such a child, who, though not fully innocent, is yet guiltless; for they put ideas and actions into him which are as yet foreign to him; they make him bad in act, though not at first in will; they beat him spiritually dead, so that he recognizes that he has not this life from himself, and cannot give it to himself. But the genuine life is now gone. He cannot give it to himself; and what now avails knowledge without deed? what avails the powerless wish without the power of action? That which these educators have made bad and evil by believing that a child cannot attain to the possession of heaven, cannot carry a heaven in his mind, without previously, to speak mildly, going to it through guilt, — that will the dear God make good; and that they call making the child pious.

This proceeding is like that of the little kind-hearted child who says, with firm conviction, about his fly or his bug, which, from his much handling, is feeble, also, indeed, footless, "it is tame." So there are still children and boys who, with great seeming incorrectness, on account of not perceiving, not considering, and also not knowing, the outward relations of life, since they give themselves up so wholly to the attracting inner life, yet have the most inward yearning and desire to be good and virtuous. But such boys, alas! become actually bad in themselves, just because they are too frequently not only not understood, but even misconceived, in their most fervent strivings. But yet, if this acknowledgment of their striving should come to them at the right time, they would certainly often become the most virtuous of men without comparison.

Yes, children and boys are often punished by adults, parents, and educators, for faults and errors which they had perhaps previously acquired from the adults.

Punishment, especially punishment by word, very frequently first implants faults in the children, and even brings first to their knowledge faults which they do not at all possess.

Section 54.

The man, therefore, sins far more against the children than against God; for what power has the bad action of the good-for-nothing child over the proved, acknowledged virtue of the father? Yet what harm this child can do to the soul and body of a younger child by word and deed! This is also the relation of man to man, and of man to God.

Section 55.

As has been already indicated, a deeper, more anticipating, more yearning feeling in the boy's mind goes through all that he does in this space of time. All his actions have a character in common; for he seeks to find the unity which unites all things and all beings, and thus also to find himself in and among all things.

A yearning which he himself cannot explain attracts him especially to the things of Nature, — to the plants, flowers, etc., which dwell in obscurity; for a sure feeling tells him that what will satisfy the yearning of his mind is not manifest and outward, but must be demanded from obscurity and gloom.

The nourishment of this yearning is not only early neglected, but even the efforts of the boy to nourish it himself are, alas! too early disturbed; for the naturally-trained boy of this age, though feebly and unconsciously, though the indications of his seeking are unknown to himself, actually seeks only the unity which unites all things, the necessarily living unity, the cause of all things, — God. The boy seeks not the god made and formed by human skill and human understanding, but Him who is always near to heart and mind, to the living spirit, and therefore known only in spirit and in truth, and to whom only such aspirations can rise.

The boy in his maturity finds satisfaction only in having found Him whom he had anticipated in his inexplicable yearning and seeking, because then only has he first found himself.

Hence the freely-active inner and outer life of the boy in the school-age and as a scholar.

Now what is school?

Part IV.

MAN AS A SCHOLAR.

1. WHAT IS SCHOOL?

Section 56.

School is the effort to bring the scholar to the right consciousness of the nature and inner life of things and of himself; to teach him to know, and to make him conscious of, the inner relation of things to each other, to the scholar, and to the living cause and clear unity of all things, — to God.

The aim of this instruction is to bring the child to an insight into the unity of all things, and to the rest, existence, and life of all things in God, in order to be able to act and work in life in accordance with this insight. The way of attaining this purpose is instruction, teaching.

Therefore the outer world, and he himself as belonging to it in a certain respect, comes to the scholar by school and instruction as a thing opposite to him, separate from him, foreign to him, and different from him.

Then the school demonstrates further the inner directions, relations, and references of particular things to one another, and mounts thus to higher and higher generality and spirituality.

Therefore the scholar and boy, as he enters the school, rises from the outward view of things to a higher spiritual view.

This coming-out of the child from the outer and superficial, and his entrance into the inner view of things, which, because it is inner, leads to recognition, insight, and consciousness, — this coming-out of the child from the house order to the higher world order makes the boy a scholar, the school a school.

The school as an institution for the appropriation of a larger or smaller quantity of manifoldnesses, and therefore externalities make

the school by no means a school, but only the intellectual, living breath which animates all things, and in which all things move.

Would that all those who apply themselves to the guidance, management, direction, etc., of the school as a vocation, would deeply reflect upon this!

Therefore the school purely as such presupposes a clear consciousness which, as it were, hovers between the outside world and the scholar, unites the being of both in itself, bears the inner nature of both in itself, forms a connection between the two, gives speech and reciprocal understanding to both; and this consciousness is the master in this art, and therefore called master, because he is to be in a position to demonstrate the unity of things, at least for the majority. He is a schoolmaster, because he is to demonstrate the inner nature of things to himself and to others, and to bring himself and others into an insight into this nature.

Every school-child anticipates, hopes, believes, and requires this from his schoolmaster. This anticipation, this hope, and this belief form the invisible, efficacious bond between them.

This anticipation and hope, this childlike faith of the children, is indeed the means by which our old schoolmasters effected much more for the promotion of genuine inner life in their children than many of the present school-teachers who familiarize the children with so great a quantity of things without showing and connecting them in their necessary spiritual unity.

Do not reply that, even if this higher view of the school be true, and if a spiritual inner type of the same have existence, it would be very difficult to actually demonstrate it, at least where a tailor as schoolmaster sits on his table as on a throne, and the school-children below him recite their a-b, ab, and their sum total of all teaching in a sing-song fashion; and where an old wood-cleaver in a dark city room in winter drives in the explanation of the little Lutheran Catechism as he does his wedge in wood-splitting, there would indeed be no question of a spiritual breath, being, and life!

But this is just the question: otherwise, how could the blind show the way to the lame? and the crippled help the weak upon their legs? Nothing but the anticipation and faith of the child and boy, the idea of the child who hopes and believes that his schoolmaster, just because he is a school-master, can therefore inwardly and spiritually unite that which is outwardly separate, can give life to the dead, and significance to life.

This anticipation, however misty, however obscured, it may be, is the only means by which the schoolmaster effects what he does effect: this anticipation and faith are the all-vivifying air by which the stones he gives the children to eat become food, if not for their heads, yet for their hearts. This anticipation, hope, and yearning, this all-vivifying breath, is what makes his school so dear to the schoolboy, though it should blow within four smoky walls.

The genuine spirit of the school, like the spirit of Jesus and of God, comes not by outward observation; and so schoolrooms *as such* are not airy if the breath of the higher spiritual life be excluded from them. Clear, bright schoolrooms are a great and precious gift, and worthy the daily thanks of teacher and scholars; but they, as such, do not supply this breath.

Luther's words, "to fast and prepare one's self bodily is indeed a fine outward exercise, but he is worthy and well prepared who has faith and trust," find here also their application.

The faith and trust, the hope and anticipation, with which the child enters the school, produce all the gigantic results in the above-named schools. For the child enters the school with the childlike belief, the quiet hope, the dim anticipation, that here he will be taught something which he cannot learn outside the school: here he will receive food for his spirit and mind, and outside, food for his body only: so the child later hopes and anticipates that here he will find food and drink which satisfy hunger and thirst, there food and drink for which he again hungers and thirsts.

With this faith also, he hears the customary speech in the mouth of the man who is his schoolmaster.

If the speech and word contain no high spiritual thought, yet the child's faith finds it in them; and the high spiritual power of digestion of the child draws nourishment from wood and straw.

If, now, even the tailor, or wood-cutter, or weaver, when he teaches, ceases to be a tailor, wood-cutter, or weaver to the child, but becomes to him what he is called, a schoolmaster, how much more is this the case when the schoolmaster in village or city, whether he be called organist, chorister, or rector, is or was truly a schoolmaster. But each genuine school-child, every one who has been a genuine school-child in village or city, inquires of himself with what feelings he approached the schoolhouse, and yet more with what feelings he entered the schoolroom; how it always was to him as if he entered a higher intellectual world of which he was each day more or less conscious.

How otherwise could it be possible that children who have been taken to school scarcely a whole week could daily repeat a text from the Sunday preaching — "Seek ye first the kingdom of God" — for more than a quarter of an hour without weariness, and with a feeling of heightened life?

And how otherwise were it possible that songs so rich in metaphor, and so extraordinarily full of figures as "It costs much to be a Christian," "May my heart and spirit soar to thee," could be daily sung by each scholar for a whole week in portions, even appropriated, or, as it is outwardly called, "learned by heart," with pleasure, with true inner exaltation, and with active influence on his life, not in the mature, but in the middle stage of boyhood; and so thoroughly learned by heart that youth and man in the storms and pressure of life could rest on them as on a rock, and raise himself by them as by a tree?

The petulance of the boy in the school is no contradiction to this. The boy feels more free, and moves more freely, just because of the effect of the school, of the heightened inner intellectual power and the attained aim of the school, the nourishment afforded by it.

The genuine schoolboy should not hang his head and be indolent, but should be fresh in spirit and life, vigorous in mind and body.

Therefore the actually wilful schoolboy, gayly yielding to his hearty, high spirits, scarcely imagines that it can have any injurious result in respect to the outer life.

It is a very false idea that the inworking, animating, uniting (intensive) power of man increases with years and cultivation. The inworking, animating, uniting power decreases, while the expansive, outworking, forming, diversifying (extensive) power increases.

The feeling and consciousness of the extensive forming power in man destroys, alas! so frequently, the recognition and acknowledgment of the inworking, animating, uniting power before existing. This and the alternation of the two in the nature and in the appearance of the child leads us in life to the great mistakes in the school-system and in the guidance of the children, which we so frequently meet, and which take from the life of each one its real foundation.

We now trust too little to the inworking and uniting power in childhood and early boyhood; we expect too little of it as a spiritually animating power. Therefore it accomplishes so little, even in later boyhood; for the non-use of the inner power makes the inner power die out.

Or we play with the power coming forth in the children, and remarked by them: therefore it is to us with them as with a magnet which one idly allows to hang, or even to lie, without supplying it with any thing to carry, or who lawlessly plays with its magnetic effects. In both cases the power decreases, or is wholly lost: if the magnet be required later to show its power, it is found powerless, it has no effect. So with these children: if we wish later to give them physically and morally something to bear, they prove themselves weaklings.

Would that we, in order to attain to a right judgment and estimation of the animating power of child and boy, might never forget what one of our greatest Germans said, that there is a greater step from an infant to a speaking child than from a schoolboy to a Newton!

If, therefore, the step up to childhood be a greater step, the power must also be higher. We should ponder upon this. The later extension, manifoldness, individuality, and formed state of the man's knowledge and insight (of his extensiveness) dims and even destroys the apprehension of the earlier unity, union, and vividness (intensiveness) of the human being: therefore it is the spirit only which makes the school a school, the room a schoolroom. It is not the yet greater dismemberment and isolation of what is single in itself, which indeed knows no bounds, and repeatedly sets up a new cause for dismemberment and isolation, which makes the school a school, but the union of the individual and the divided, by observation, perception, and recognition of the uniting spirit, which abides in all individuality and all manifoldness.

Never forget that the teaching and communication of a multiplicity of facts does not make the school a school, but only the giving prominence to the eternally living unity that is in all things.

But, because this is now so frequently forgotten or disregarded, there are now so many school-teachers and so few schoolmasters; so many educational institutions, but so few schools.

One may indeed not know, or at least may not have stated and may still not state with sufficient clearness and precision, what spirit actually breathed in genuine schools, and even yet breathes here and there; what spirit and what breath is yet to actually animate schools.

The genuine, true schoolmaster, in the simplicity of his calling, may indeed not have himself recognized the spirit, may not have named

and declared it; and even now, while thoroughly penetrated by it, in loyalty to his calling may not himself recognize, name, and declare it. But just for that reason it disappeared so easily and quickly, and now disappears more and more.

We see also confirmed, what to our sorrow we so often find in life, that even the highest, most precious good is lost to man, if he does not know what he possesses, if he is not conscious of it, and therefore does not hold it fast and represent it of his own accord with consciousness and freedom. The anticipation and hope, the faith and thought, of the child, point out the way indeed; but the consciousness, insight, and self-determination of the man must clearly and enduringly retain it. For man is destined to consciousness and to acting with freedom by his own choice.

Section 57.

With the vivid presentation of what school is, and is to be, comes out also the truth that the object in which the boy is to be instructed is also at the same time the one *about* which he is to be instructed: otherwise the instruction and learning remain a thoughtless play, without effect on head and heart, spirit and mind.

What has been said will answer, or make it easy to answer, the questions: Shall there be schools? Why shall there be schools and instruction? What and how shall they be?

We as spiritual and corporeal beings are to become thinking, conscious, rational (perceiving, that is, feeling and experiencing with self-knowledge), and therefore discreetly-acting men. We are to seek first for cultivation of our power, of our spirit, as received from God, for the exhibition of the godlike in life, knowing that then justice and satisfaction will be secured for all earthly things. We are to increase in wisdom and understanding with God and man in things human and divine. We are to know that we are and shall be in Him who is our Father. We are to know that we, and all things upon earth, are, in accordance with our earthly existence, a temple of the living God. We are to know that we are to be perfect like *our Father* in heaven, and we are faithfully to act and work in conformity with this knowledge. To this the school is to lead us; for this reason there should be schools and instruction; for this reason they should be constituted in conformity with this aim.

2. WHAT SHALL SCHOOLS TEACH?

Section 58.

What now shall the school teach?

In what shall the boy be instructed as a scholar?

Only the contemplation of what the development of man at the boy-stage is and requires can lead to the answer to this question. But the knowledge of what he is and requires proceeds from man's appearance as a boy.

According to this appearance, according to the manner of his appearance, in what should the boy be instructed?

The life and appearance of man as a boy at the beginning shows a lively impression of a peculiar, spiritual self, and shows the dim anticipation that this spiritual self is limited by, proceeds from, and depends on, a higher Being, in whom also the existence of all things is limited, from whom all things proceed, and on whom all things are dependent. The life and appearance of man as a boy shows a lively feeling and anticipation of a living, vivifying breath, in which all things live, by which all things are invisibly surrounded, as the fish by the water, and man and all creatures by the clear, pure air.

Man as a boy, and as a beginning scholar, appears to perceive his spiritual nature, and to anticipate God and the spiritual nature of all things. He appears in effort and by effort to make the perception more and more clear, and to confirm the anticipation.

Man as a boy faces the outer world, which in itself opposes him, with the hope and faith that a similar spirit lives in it and over it as lives in him and over him; that it is penetrated by a similar spirit to that which penetrates him; and he is drawn by an inward, irresistible longing, — recurring with each new spring and autumn, with each new, fresh morning and quiet evening, with each peaceful, festal day, — to become conscious of this all-ruling spirit, and, as it were, to appropriate it.

The outer world appears to man in the stage of boyhood with a twofold expression: first, conditioned by and proceeding from the requirement and power of man; or, secondly, conditioned by the power working in Nature, and proceeding according to the requirements of this power.

Speech comes forth between this outer world of form and body

and the inner world of mind and spirit, originally appearing as one with both, and by degrees independently extricating itself from both, but by so doing connecting both worlds.

Section 59.

So mind and outer world (*Nature*, here first of all), and the intermediate which connects them, *language*, are the poles of boy-life, as they were of the whole human race in the first stage of its maturity (as the Sacred Books show). By these the school and the instruction should lead the boy to a threefold but single recognition of himself in all respects, and thus to the recognition of man in general, according to his nature and relations; to the recognition of God, the eternal condition, the eternal cause, and the eternal fount of his being and of the being of all things; to the recognition of Nature and the outer world as proceeding from and limited by the spiritual.

The instruction and the school should lead man to a life and course of conduct in accord with this threefold yet single recognition. The school and the instruction should lead the boy by this threefold, single recognition, from inclination to will, from activity of will to firmness of will, and, thus constantly advancing, to the attainment of his destiny, his vocation, to the attainment of his earthly perfection.

3. CONCERNING THE PRINCIPAL GROUPS OF INSTRUCTION.

A. *Concerning Religion and Religious Instruction.*

Section 60.

Religion is the effort to raise to clear consciousness the anticipation that the individual, spiritual self which man perceives, the spirit of man, was originally one with God, and is to be in the union with God founded upon this consciousness, and to continue to live in this union with God in every position and every relation of life, untroubled and unweakened. Religion is not a fixture, but a constantly advancing effort, and just on that account has a constant existence.

Religious instruction is to animate, to confirm, to clear, the perception of a spiritual self, of the soul, of the spirit and mind as resting in, limited by, and proceeding from, God; to make known the properties and nature of the soul, of the spirit and mind limited by God; to

give an insight into the necessary nature and workings of God; to give an insight into the relations of God to man as they are made known in the individual mind and life of each person; in life as such, and especially in the life and history of the development of humanity which has been preserved in, and made known by, the Sacred Books which have applied this knowledge to life as such, and especially to the individual life of each person; which have applied it to the continuous development and improvement of humanity, to the representation of the divine in the human, and so to the recognition and fulfilment of the duties of man; that is, to what man has to foster in accordance with his nature; to present and demonstrate the means and way; to give sufficient aid to the effort to continue to live in true union with God, or, if this effort be disturbed, to re-establish it.

Therefore religious instruction always presupposes religion, weak though it be.

Religious instruction can be fruitful, influential in life, acting upon it only in proportion as it finds true, though as yet formless, indefinite, and unconscious religion in the mind of man.

If it were possible that a human being could be without religion, it would also be impossible to bring religion to him.

This should be considered by the frivolous parents who let their child grow up even to the school-stage without affording the slightest nourishment to the religiousness of his mind.

Knowledge and insight into the nature of religion — simple though it is, though it lies in the nature of man, and so is one with man — so rarely shows itself pure, and it is so hard for it to show itself pure, because man, as at the same time corporeal and living in space, always presupposes and underlays a separation of that which has been one; but God and the spiritual, eternally self-disclosing, remain one and undivided just because of spirituality, and because the conception of union in itself, however dim it may be, always underlays the conception of union in space or time in the mind of man. But just as little as a genuine oneness in the past presupposes a separation (as, indeed, the former precludes the latter), just as little is the connection with space and time required and conditioned by union, the one excluding the other.

In the circle of experience and perception this fact is illustrated and made clear by far more experiences than are needed; for the idea, the vivid, formed thought, which man puts into any outside work, was directly one with his being, and, indeed, bears within itself the

speaking personality and individuality of this man. This thought belongs in this particular form to this man only; and were it to become conscious of itself in the form given to it, could it return to the totality of the thought of the man who has thought it, that is, could it give an account of its relation to the totality of the thought of this man, it would consciously further develop and continue to cultivate this relation, and could consequently raise itself to an anticipation of the whole thought of this man: it would, indeed, even be able to raise itself to at least a dim anticipation of the fundamental thought of the man in whom it has arisen. For each man has actually but one single thought of his own, especially and pre-eminently belonging to him, which is, as it were, a fundamental thought of his whole being, the keynote of the symphony of his life, which he strives to make clear and represent through a thousand other thoughts, through all his actions. And, nevertheless, the man has by no means in any respect become less by the representation of this living, formed thought, and by all the thoughts within him outwardly represented in all shapes and forms. And although this thought now appears placed outside of the man, yet the man whose thought it is will willingly and always recognize it as his own, and work constantly for its improvement and continued cultivation.

The thinker and the thought (if the latter were conscious of itself) must both be always vividly penetrated by the fact of having formerly been one; and nevertheless the thought is not the thinker himself, although, according to its nature, one and single: such is the relation of the human spirit to God.

A father has one or many sons. Each is an independent, conscious being; but who can controvert or deny that not every son expresses in individuality the nature of the father?

Each son bears within himself the father's nature wholly, but in individuality in a manner peculiar to himself, but in this case altered by the life and being of the mother. Nevertheless, no division has taken place in the father by this independent existence of the son; the fatherly spirit, the fatherly mind, the fatherly life, is not divided or lessened by giving life and existence to the sons.

The son, and each of the sons, is, even in the smallest particular, the father, only in new individuality: indeed, sons of one and the same father, of the same parents, resemble each other in opinions, speech, tone, and movements, so that one can be, in many respects, put in the place of the other without taking into account the trifling

new individuality. Nevertheless, no one of them is a part of the others. Each is whole: no one is a special part of the father. As they are whole and undivided, so also is the father whole and undivided.

If we would perceive the human with human clearness, we would thus anticipate, yes, know, the godlike.

Just as little, also, does union presuppose a connection with time, space, or material. Cannot the thinking, feeling man be at one with his friends and beloved ones, even act in union with them, although separated from them by lands and seas? Cannot and does not the human spirit feel in union with men of whom it has only heard, whom it never saw, and never will see? Does it not act in union with such men? Cannot man feel in union with men who lived and worked thousands of years before, or who may appear thousands of years later as individual beings upon the earth? Can he not act in union with these? What might be guiding and enlightening to man he spurns; but for that reason, also, he so often gropes without guide or light where he so often needs both, to go up or down and to wander in the province of the purely spiritual, of that which is beyond time and space, in the province of the divine.

It is and remains eternally true that in the pure and clear human relations, especially in the parental and spiritual human relations, are reflected the divine-human.

And through those pure relations of man to man we recognize these relations of God to man and of man to God, we attain to seeing and perceiving the latter.

Section 61.

If man consciously and clearly recognizes that his spiritual self proceeded from God, was born in God and from God, was originally one with God, and as a necessary consequence constantly depends on God, is also in constant and uninterrupted, continuous communion with God; if he recognizes his welfare, his peace, his joy, his destiny, his life, the genuine and only true life in itself, and the cause of his existence in this eternal, necessarily conditioned dependence of his personality upon God; in the clearness of this recognition, in the vividness and constancy of a mode of action in accordance with this recognition and conviction, he thus recognizes himself as the child of God, if he acts and lives in accordance with this recognition. This is the Christian religion, the religion of Jesus.

Therefore a pure, earthly, human, childlike relation, thought, and action is such as was told of Jesus; he was subject unto his parents.

Therefore a genuine fatherly and motherly, parental relation, thought, and action, which honors, notices, and acknowledges in the child the yet unrecognized and undeveloped divine, is such as was said of Mary; — she pondered all these things in her heart.

Therefore pure, human, parental, and childlike relations are the key to that heavenly, godlike, fatherly, and childlike relation and life, to the representation of a genuine Christian life, thought, and action.

Therefore the penetration of the purely spiritual human, of the truly fatherly and childlike, of the genuine parental relations, is the only key to the recognition, perception, and anticipation of the divine-human relations, — the relation of God to man, of man to God.

Only in the measure that we are thoroughly penetrated by the pure, spiritual, inward, human relations, and are faithful to them even in the smallest detail in life, do we attain to the complete knowledge and perception of the divine-human relation; only in that measure do we anticipate them so deeply, vividly, and truly, that every yearning of our whole being is thereby satisfied, at least receives its whole meaning, and is changed from a constantly unfulfilled yearning to an immediately rewarded effort.

We do not yet know, we do not, indeed, as yet anticipate, what is, notwithstanding, so near to us, what is one with our life, with ourselves; we are not even faithful to the recognition and anticipation by word, on which we pride ourselves. This is daily evinced by our behavior toward our parents, toward our children, our human education. We wish to be God's children, and yet do not become, and are not, sons of our fathers, of our parents.

God must be our father; and we are far from being the fathers of our children. We wish to see into the divine; and we leave unnoticed the human which leads us to the divine.

To see into, and to become and be penetrated by, the divine-human relation, is the wide-reaching blessing which rests upon pure, parental-childlike, and childlike-parental relations, and upon a life faithful to their requirements.

We set outward bounds to the continually developing humanity; we enclose them in outward bounds, and believe we have already reached these bounds in their earthly development. Humanity is to us now dead, standing still, instead of living only in and by continual

development and cultivation, and not as it indeed is, an ever-renewed shaping.

We do not know our own nature and the nature of humanity, and yet wish to know God and Jesus. We believe that we already know our own nature and the nature of humanity fully: therefore we do not know God and Jesus.

We separate God and man, man and Jesus, and yet wish to come to God and Jesus. We do not know and do not see that every outward separation conditions and presupposes an original inner union; and, unambiguously as this is conveyed to us by the word and conception of separation, we yet overlook it.

The inward and individual relation of Jesus to God cannot be humanly indicated more comprehensively, more truly and suitably, than by the relation of the son to the father, — the highest and most fervent relation which man can recognize, perceive, and anticipate, but which is mostly viewed only outwardly, and not inwardly, spiritually, penetratingly noticed in accordance with its nature. But the child becomes a son, a genuine, real son, only when he develops the nature of the father in himself, and brings himself to consciousness and clear insight; when he lets the opinions, nature, and efforts of the father be the moving cause of all his thinking and acting, and esteems conformity and likeness in behavior and action to the father, whose high worth he recognizes, to be his most beautiful vocation, the fount of the peace and joy of his life.

Such is the pure, genuine high, but truly human relation of the son to the father, the relation of the true genuine son to the true genuine father.

The word, the name of son, everywhere presupposes a consciousness (where it is used in its whole significance), an already attained consciousness, a sharing of the opinions and efforts of the father, a complete, essential, inward, spiritual accord of son and father.

Of course, this relation takes place first of all with the oldest, the first-born son, would naturally take place with him first. While all his younger brothers are yet children, he is the only, the first-born son.

Jesus is the only-begotten Son of God; he is the beloved Son of God; for he is the first among all the human and earth-born, among all the heaven-born, who in his recognition and insight, in his thinking, his opinions, and his deeds, was deeply and vividly penetrated by his childlike relation to God, by God's fatherly relation to him: therefore is he the first-born of God, the first-born of all creation.

The oft-repeated saying of Jesus — Believe in me; if ye would believe in me, — says therefore if you would anticipate, recognize, conceive, and understand that the highest which man (as a divine being who has made his appearance upon earth) can recognize, conceive, and perceive, — his having proceeded from God, and so his constant limitation by God, his dependence upon God, — is clearly and vividly expressed in me, in my life, in my thoughts, in my opinions; if you would thus through me, through my life, my thoughts, my opinions, my behavior, my deeds, and my words, come to the anticipation, recognition, conception, and perception that each man is to raise himself to this insight, to this consciousness (which cannot be more highly, purely, and sufficingly designated than by the relation of father and son), and is to live in accordance with it, you would also raise yourselves to the true life, you would live as truly and eternally as God and I myself live eternally, you would thus receive through me the true eternal life, and I would give you the true eternal life.

To acknowledge this, and to apply it to the representation of a pure, human life, is Christian religion.

Christian religion is the eternal conviction of the truth of what Jesus said of himself, and a firm, enduring method of action faithful to this conviction; it is the conviction that the truth of the knowledge expressed by Jesus comes to each man wherever he turns with his spiritual, seeking, testing, examining, questioning eyes; that this one truth, this one spirit, meets him everywhere, and that if man's spiritual eye would see and recognize this one divine truth, this one divine spirit everywhere in all manifoldness, he would then obtain from this spirit the consolation and help which he would need in representing this truth in a world where the cultivation of the inner, spiritual eye, is still so far withdrawn from the cultivation of the outer, sentient eye, the recognition and cultivation of the inner man from the knowledge and cultivation of the outer, that he would then rise to the highest knowledge, not alone of man, but of all created beings; that is, of all beings who have proceeded from unity to individualities, to the knowledge of the truth,

that the infinite is represented in the finite;
the eternal in the temporal;
the heavenly in the earthly;
the living in the dead;
the divine in man.

Christian religion is therefore the clear insight and conviction firmly and eternally grounded in itself, and far removed from error; and a life and mode of action in full accord and pure harmony with this conviction and knowledge that the revelation and manifestation of the single eternal living being, God, must necessarily, just as a revelation, be threefold; that God makes himself known and declares himself in his unity as Creator, Preserver, Ruler, and Father of all things; that he makes himself known and declares himself, has made himself known and declared himself, in and through a man who received his whole nature into himself, in a single being of the highest completeness and perfection, who was therefore his Son, his only-begotten and first-born Son; that God has made himself known and declared himself, and still uninterruptedly makes himself known and declares himself, in all manifoldness, in all which appears, in all which exists, in the workings, the life, the spirit of all things, as the one only life and spirit, the spirit of God, and this always as the single and living God.

In the same manner we, humanly indeed, but with deep spiritual significance, with exhaustive spiritual truth, say, the spirit of the peace, of the order, and of the purity of this family, expresses itself in each individual thing as well as in the whole house; so we correctly and with true anticipation say, the spirit of the father expresses itself in all the children and in the whole family; so we, with high creative truth, say, the spirit of the artist goes forth from all, as well as from each of his works, and, with right sense and feeling of truth, we say it expresses itself vividly from them.

The Christian religion brings with it the constant conviction that it is this recognition of the threefold revelation of God which leads not only men, but all creative beings (that is, beings who proceeded from the existence of the unity of God, as existent individuals) to the recognition of their existence, to the fulfilment of their vocation, to the attainment of their destiny; and also the conviction that each individual, if he wishes to attain his destiny, must necessarily and inalienably (faithful to his being) make himself known and declare himself in constant, continuous manifoldness in this triune way, in unity and as unity, in individuality and as individuality, in manifoldness and as manifoldness.

The truth of this conviction is the sole foundation of all insight and knowledge. This truth, this conviction, is the true test of all action. This truth is the foundation of all religious instruction. By the recognition of, insight into, and application of, this truth, is Nature

truly recognized as that which it is, as the work and book of God, as the revelation of God.

By the recognition of this truth, the natural as well as the human, language, and all teaching and learning, all science and skill, receive first their true significance, their true life. By this conviction life first becomes a truly self-contained whole, a unity in itself, on all sides, and in all directions, and in all its phenomena.

By this recognition and conviction, true genuine education of man first becomes truly possible.

With the recognition of this truth, with insight into the nature of this truth, come light and life, and, if necessary, comfort, aid, and help, in all circumstances; and thus life first receives significance and aim.

Therefore Jesus commanded his disciples, Go ye into all the world, and teach all nations; glorify and consecrate them to the recognition of God the Father, of Jesus the Son of God, and of the holy spirit of God; to a life suited to this recognition and insight, and to all insight necessarily proceeding therefrom.

Therefore the truth of this threefold revelation and manifestation of the one God is the foundation and corner-stone of the religion sufficing for all men under all zones, which they, though dimly, anticipate; for which they yearn, although unconsciously, for it leads men in spirit and in truth, in insight and life, back to God.

Each man as proceeding from God, existing through God, and living in God, is to raise himself to the religion of Jesus, to the Christ-like religion; therefore the school must, first of all, teach Christian religion; therefore it must, first of all and above all, give instruction in Christian religion; everywhere and under all zones the school must instruct for and in this religion.

B. *Concerning Physics and Mathematics.*

Section 62.

What religion says and expresses, Nature says and represents. What the contemplation of God teaches, Nature confirms. What proceeds from the contemplation of the inner, the contemplation of the outer makes known; for Nature, as well as all that exists, is the declaration and revelation of God. Every thing that exists has its foundation in the revealing of God. Every thing that exists has its foundation and existence only through the life abiding in God.

Each thing is divine nature, divine being; each thing is therefore again, relatively speaking, a unity, as God is unity itself; each thing, therefore, because it is always a unity (though only relatively), also makes known its being in a threefold way by a threefold representation and revelation of itself, and so only in and by constantly progressing, therefore relatively all-sided development. This truth is the foundation of all contemplation and knowledge of Nature and of all insight into Nature. Without it, no genuine, true, fruitful investigation and knowledge of Nature takes place. Without it, no true contemplation of Nature, leading to insight into the essence of Nature, is possible.

It is possible for the Christian only, for the man with Christian thought, life, and effort, to come to a true conception and vivid recognition of Nature; only such a man can be a genuine naturalist. It is possible for man to approach to a true knowledge of Nature only when he is consciously or unconsciously, dimly or clearly, a Christian; that is, when he is penetrated by the truth of the one living power of God working in all things; when he is filled with the one living spirit of God, which is in all things, and to which he is himself subjected, through which all Nature has its being and existence, and through which he is in a condition to perceive this one spirit in its being and its unity, in the smallest phenomenon, and in the sum of all the phenomena of Nature.

Section 63.

The relation of Nature to God can be truly and clearly perceived and recognized by man through his perception of and making clear the inner and innermost spiritual relation of the genuine work of human art to the artist who has produced it. This relation can be secondarily perceived and recognized with each work of man in reference to the man to whom it owes its origin.

On all which the spirit and the life creates, produces, and represents, the spirit and the life must impress, implant, its nature; spirit and life must impress its seal on all parts of what is represented.

Absolutely nothing can appear, nothing visible and perceptible can be produced, which does not bear within it the life and spirit, the *imprint* of the spirit and life, of the being by whom it has been produced, to whom it owes its existence. And this holds good in respect to the work of each man, from the highest artist to the most ordinary laborer, from the most visible to the most spiritual and most elevated

works of man, from the most abiding to the most transient activity of man: so is it also with the works of God, Nature, the creation, all that is.

The piercing, accurate glance can recognize in the work of art the capacities and laws of thought, and of perception of man in general, as well as the degree of cultivation in thought, and perception in the individual creating man: so can the creating spirit of God be evolved from his works, and conceived of by observation of his works.

We do not notice this sufficiently with the works of man, with works of art; therefore is it so difficult for us to recognize it in respect to Nature, the work of God. We do not sufficiently lay the foundation of the innermost spiritual relation of the artist to his work in contemplating works of art; we look upon their origin too mechanically, too outwardly; whereas they, if they are to be high works of art, not hollow masks of art, are always a representation of the most individual, most inner life of the artist; but for that reason, the genuine spirit of the work of art, like the spirit of Nature, remains distant from us, foreign and dead to us. As, now, the work of the artist bears within it, and humanly but exhaustively, sensibly, and significantly speaking, breathes out his *spirit* and character, his *life* and *existence*, and the man who produced it remains, notwithstanding, the same unweakened and unseparated being, his power indeed even heightened, so also the spirit and being of God — although it is the cause and the fount of all that exists, and although all that exists bears within it this one spirit of God, breathes out this spirit that it may extend itself — remains in itself the One Being, the One Spirit, unweakened and undivided.

As no material part of the human spirit, of the artist, is in the work of art, and yet the work of art bears within it the whole spirit of its artist, so that he lives in it, expresses himself by it; and as the work breathes forth again his spirit, even to others; is awakened, developed, improved, and formed by his spirit; as thus the man's spirit is related to the work produced by him, as the man as a spirit is related to that he has produced — so is the spirit of God related to Nature and to all created things. The spirit of God rests, lives, and works in Nature, expresses itself by Nature, imparts itself through Nature, continues to shape itself in and by Nature; but Nature is not the body of God.

The spirit of the work of art, the spirit to which the work of art owes its existence, is the one undivided spirit of the artist; but it

now continues to live and work (having, as it were, gone out from the artist) independently, and yet still with the artist's own spirit in his work of art: so the spirit of God, having proceeded from God, lives independently, and yet with God's own spirit, in Nature, and works on and by Nature.

As Nature is not the body of God, God himself does not dwell in Nature as in a house; but the spirit of God dwells in Nature, to produce, protect, foster, and develop Nature. For does not even the spirit of the artist, though only a human spirit, dwell in his work, produce, protect, foster, and guard it? Has not the spirit of the artist given earthly immortality to a block of stone, to an easily-perishable piece of linen, even to a winged and fleeting word, which passes away as soon as uttered, and to all his works, whether the artist be a musician, or an artist in words, drawing, or solids? Has he not given to the work of art expressed by himself the most choice, careful fostering, the most tender protecting, the high esteem of the noblest human spirits as a life-dowery?

What man does not understand the lofty, powerful spirit of a pure, human work of art, that, like the pure glance of the helpless child, at once supplicates and commands? And yet it is the work of a human spirit, and this spirit protects and fosters it still, however long may be the time, and wide the space, which separates it from the artist.

Toward a genuine work of art created by the spirit of the artist — not of course toward the mechanical work, of which the maker thought little or nothing — this artist feels just like a father who lets his beloved son go away from him; he sends this son on his way with his blessing, care, and protection.

It is by no means a matter of indifference to the genuine artist who buys his work of art, as it is by no means a matter of indifference to a good father what society his son frequents; but yet he trustingly and confidingly lets his son go into the world; for his spirit and striving and thought rest on and in the son, as the character of the artist lives and breathes wholly in his work, in the smallest, most delicate parts, in each line, even in each way of connecting the lines; and the artist hopes that this spirit and character, which he knows to be in accordance with his high being and striving, will protect his work, will bring it to men who will receive the formed spirit into their own lives, and let it work in them and mould them.

The work of art is external to the man; no material part, no

drops of life-blood, pass from the man into his work, and yet the man preserves, supports, fosters, and protects it; he now removes from it, and seeks for the future to remove from it, whatever may do it the slightest injury. Man is, and feels himself, one with his work of art; how much more must God support and foster his work, Nature, and remove from it whatever will do it the slightest injury! for God is God, and man is only man. Nevertheless the artist also, in whatever department of art he may be, remains always independently and unchangeably the same in himself, is submersed in all his works; so also God remains unchangeably the same, — he also might be submersed in Nature.

Indeed the work of art, the work of man, can, like Nature, the work of God, be outwardly submersed, and yet the spirit expressed in and demonstrated by it, living and working in it, may still continue to exist and unfold itself yet more. Indeed it now forms itself for the first time with freedom, and reveals itself clearly and vividly.

Each individual who works for his own aim, at whatever stage of insight it may be, understands, or should understand, the submersed power in the ruins of human art, whether it be the powerful work of individuals of gigantic power, or the colossal work of the scarcely yet conjectured, much less credited immense power of the many, most intimately connected for one common aim.

Those ruins speak admonishingly to the weaker generations that follow; and the generation that begins to be conscious of its own existence raises itself, trusting in and encouraged by these signs of vanished though by no means only external human power and human greatness. So the colossal remains of fallen mountains and chains of mountains testify to the greatness of God; and man also, encouraged by them, feeling like spirit and like power in himself, raises himself as the weak ivy climbs the mighty rock, and absorbs from it strength and nourishment, not only for its continued existence, but also for its higher climbing.

So the similar living and deep inner and spiritual references of man to the work of art, and of God to Nature, are everywhere continuing and pervading.

If barbarians — rough, unfeeling, thoughtless men — destroy the work of art, destroy even the trace of a human spirit's having wandered, worked, and created, the noble, the human-feeling man sorrows almost more than if the life of an ordinary living being had been destroyed.

But does not even the human work also bear with it independent, continuous cultivation of the inlying spirit and thought?

Cannot the expression of character of a work of art act upon whole generations, elevate them or ennoble them?

And yet this is effected by merely human art work; and now what can, will, and must the works of God do? What must Nature, the work of God, be to man? We are very zealous to learn to know the life and strivings, etc., of human works; we study human works and rightly. The undeveloped maturing man must grow by the development of matured man; how much more shall we now exert ourselves to learn to recognize God's work, Nature, and to learn to know the objects of Nature, according to their life, their significance, and thus to learn to know the spirit of God!

And to this we should feel ourselves already drawn, already called by the fact that genuine human works of art by which the pure spirit of man, the spirit of God, is clearly expressed, are not easily to be obtained by every one, and in every relation of life, and at every instant; while man finds himself everywhere surrounded by pure works of God, by works of Nature from which the pure spirit of God clearly speaks.

We can, it is true, also find and recognize the spirit of God by and in the spirits of men, but it is difficult in each individual case to distinguish the general human form from the particular human; it is difficult to distinguish which of the two preponderates here, and which, at any particular time, is actually working. Yet here, with the pure works of Nature, the purely natural by far preponderates; the particular natural being retreats before the general. And so God's pure spirit not only comes forth more purely and clearly in Nature than in human life, but man sees in this spirit of God clearly expressing itself in Nature, the nature, the dignity, and elevation of man mirrored in their complete clearness, purity, and originality.

But man by no means looks into Nature only in general (as has already been indicated), but he even looks into it as into a perceptible but living work, expressing not the conception, but the thing, the relation itself. He sees in Nature, as in a picture, his nature, his vocation, his destiny, the necessary limitations and necessary phenomena of the impeded and of the completed attainment of his vocation and destiny; so that man, following these quiet, sure, certain, clear, and impersonal teachings of Nature, will not only surely recognize by them what is to be done in each instant of life, but, acting in accordance with these teachings, will certainly satisfy all demands upon him.

Among all the objects of Nature none appear in respect to such

teachings more true and clear, more complete and yet more simple, than the vegetable growth, the plants, and especially the trees, on account of their quiet thoughtfulness and the clear demonstration of their inner life. Thus the trees may be rightly termed natural objects for the knowledge of good and evil, since they actually are so, as they were thought and called with such comprehensive truth, with such depth and significance, even at the first appearance of the acquired consciousness of the human race. And not only the phenomena of individual human life can be perceived in the tree-world, but also the indispensable phenomena of human development can be perceived (since the contemplation of self-development and individual development, and the comparison of these with the general development of the human race, shows that, in the development of the inner life of the individual man, the spiritual development of the history of the human race repeatedly expresses itself; and the whole human race can be looked upon in its totality as one man, in whom the necessary stages of development of the individual man can be demonstrated); but these phenomena are scarcely yet anticipated, much less clearly demonstrated with true precision, remote from all arbitrariness and superficiality; yet the parables of Jesus, if carried out and carried on, might lead to this clear demonstration.

A much wider application might be given to this perception and contemplation of Nature, which is here only touched upon, if it were not inadmissible on account of general complete ignorance of the subject, and if it were not founded upon an observation of the outward phenomena of Nature and upon an observation of the inner developments of one's own life which are now very rarely found.

If we seek for the inner foundation of this high symbolical meaning of the different individual phenomena of Nature, especially in the stages of development of the objects of Nature and their phenomena in reference to man, to his stages of development, and the phenomena of those stages, we shall clearly perceive that it (the meaning) has its firm and sure foundation simply in the fact that Nature and man have their foundation in one and the same eternal, single Being, and that their development takes place according to similar laws, only in differing stages.

So, now, the contemplation of Nature and man in comparison and combination with the facts and phenomena of the general development of humanity reciprocally explain each other, and each leads to the deeper knowledge of the other.

By clear insight into the limiting, creating relation of the spirit of man to his outer work, man comes also to a clear insight and perception of the relation of the limiting, creating spirit of God to his work, to Nature; he also comes to the recognition of the way and manner in which the finite proceeds from the infinite, the corporeal from the spiritual, Nature from God: for even man also, though in appearance a finite being, does not always need outward-forming members (arms and hands) to bring forth his work, and present it outwardly; but even his will, his determining glance, his breathed-out word, forms, creates, and develops. Man also, although a finite being, can, without material, bring forth material to form.

Whoever still lacks a proof of this need only go through the whole series of stages of development, limitations, and phenomena, from the most incorporeal, inward thought, to the most formed, most material word, even to writing. Therefore man, in his own thinking, can recognize and perceive, not as a conception, but through the pure fact itself, even that which is most difficult to perceive (the fact that the outward, the corporeal, has proceeded from the innermost, the most spiritual) as the effect and result of his most individual, innermost thinking, coming out into an outward work.

Therefore as the spirit of the artist is in the work of art, as the spirit of the man is in the work of man, so is the spirit of God in Nature. As the work of art lives and moves in itself in accordance with its spirit and in reference to its creator, so Nature (which is born of God) lives and moves in itself in accordance with its spirit, in reference to God its Creator, and in inner spiritual reference to man as a work of God, living in and through God, and radiating the spirit of God.

As in the world of art the spirit of man appears and expresses itself invisibly yet visibly, and as the world of art is thus invisibly yet visibly a spiritual kingdom, so the spirit of God appears invisibly yet visibly in Nature, and Nature is thus invisibly yet visibly the kingdom of God.

Section 64.

To anticipate, to acknowledge that the kingdom of God is thus threefold (the visible, the invisible, and that which is invisible yet visible), and to let it influence our life, alone give us the peace which we from the first feeling of our selfhood seek within and without, and to which we are attracted even to the detriment of our own life, to the

loss of our outward possessions, of our outward happiness, whatever it may be.

Therefore man, especially in boyhood, should be made thoroughly intimate with Nature; not according to its peculiarities, to the form of its phenomena, but to the spirit of God abiding in it as it lives and moves in and over Nature.

This the boy also deeply feels and requires; for this reason nothing so firmly connects teacher and scholar with yet uncorrupted sense of Nature, as the common effort to employ themselves with Nature, with the objects of Nature.

This should be considered by parents as well as by teachers of schools; for this reason the latter should, at least once a week, go into the open air with each division of their school, not driving them out as a shepherd his sheep, nor leading them out like a company of soldiers, both of which we have seen; but the teacher should go with them like a father among his sons, a brother among his brothers, and bring them to a nearer perception and conception of that which Nature or the season brings before them.

School-teachers living in village or country must not reply to this, "My school-children are out all day thus; they run about out-doors."

Yes, they run about out-doors; but they do not live out-doors; they do not live in and with Nature.

Not only children and boys, but many adults, are, in regard to Nature and its essence, as the common man is to the air; he lives in it, and yet scarcely knows it as something individual, still less according to its necessary property of maintaining bodily life; for what in common parlance is called air are either the streams of air or the degrees of the warmth of the air.

Therefore, even those children and boys who are always running about in the open air, perceive, divine, and experience nothing of the beauties of Nature and of their effect on the human mind; it is with them as with those who live in and have grown up in a very beautiful country, who divine nothing of its beauty and its spirit.

Yet — and this is the most essential — the boy divines, finds, and, with his own inner spiritual life, looks into the inner life of surrounding Nature: but in and with the adult, the like does not come to him; that germinating inner life is checked and stifled even at its beginning.

The boy requires from the adult the confirmation of his own inner spiritual perceptions, and rightly from his conjecture of what his elder should be, from his respect for his elders.

But if he does not find this confirmation, there is a twofold result, — disrespect for his elder, and (in himself) withdrawal of the original inner conception and perception. Hence the importance of the wandering of boys and adults in common efforts to take into themselves the life and spirit of Nature, to let this life and spirit live and work within them, which would soon put an end to the idle, fruitless running about of so many boys.

The tormenting, in the manner of treating animals and insects, which we find especially in young boys who are very good-hearted and well-meaning (not the tormenting as such), has its foundation in the efforts of the little boy to obtain an insight into the inner life of the animal, to appropriate to himself its spirit.

But non-explanation, want of guidance, misconstruction, mistaking, and misguidance of this impulse can later make such boys into actual, hardened tormentors of animals.

Section 65.

So the being and effect of Nature in its wholeness, appeared and appears to the inner contemplation as a representation by God, and of God; as a word of God, expressing, communicating, and awakening the spirit of God in and by its totality. Yet it represents itself otherwise to the customary outward contemplation. Here it appears as a manifoldness amongst and in different and separate individualities, without definite, inner, living coherence; as individualities, each of which has its particular form, its particular course of development, its particular destination and aim; without expressing that all these outwardly different and separate individualities are organic, connected members of a great, living organism of Nature, of a great, inward, cohering whole of Nature; without expressing that Nature is such a whole.

Section 66.

This outward view of Nature, resting upon the individualities of the phenomena of Nature, upon the individual objects of Nature as different and separate, resembles the view of a great tree from without, where each leaf appears strictly separate and different from the others, — where, therefore, no inner bond goes from leaf to leaf, from twig to twig, within the little flower from calyx to petal, and from this to stamen and pistil; but finally — when thoughtfully striving and looking with the inner eye for the nearest individualities, the nearest

connecting link is sought and found, and so rising from each common unity to the next higher, and thus at last to the highest — shows itself as an outward phenomenon in the most deeply-hidden heart-point, and in the law which works therein.

That outward contemplation of Nature in its individuality resembles the outward view of the starry heavens, which only combines the isolated stars into great constellations by arbitrarily drawn lines, but the clearest, sharpest, and most developed spiritual eye can alone divine the inner connection of the stars, — such an eye only can perceive this connection in the union of smaller world-wholes to greater ones.

In this common and merely outward contemplation of Nature, the individualities of the different and various objects of Nature appear not so much as the production of One Being and Essence, as the result of different acting powers. Yet this view cannot suffice to the one and individual spirit of man, even in boyhood.

Section 67.

Therefore the man while still a boy seeks for this unity and union in this outwardly separate and various manifoldness and individuality; he seeks for unity and union in a separation (proceeding from an inner necessarily developing law) of what to the outward view seemed disordered heaps grouped together. He is in boyhood satisfied in his mind when he can conjecture this unity and union; but he is first satisfied in spirit at a later period, when he finds them.

But man is led by faithfully tracing out this manifoldness of Nature to the knowledge of the outer unity of the manifoldnesses and individualities of Nature, as the mentally tracing back the manifoldnesses and individualities of a plant leads to the recognition of a deeply-lying law which can be only spiritually discerned; for — with all the peculiarity, individuality, and separateness of the objects of Nature — the peculiar nature and the peculiar appearance, form, and figure of each thing recur always to the nature of the power as the ultimate, inner cause, as the connecting unity from which all manifoldness and individuality act, and from which they proceed and on which they depend. But power[1] is according to its inner nature only conditioned in its own existence, proceeding from the existence through the working as the outward appearance. Therefore power when appearing is the ultimate cause of each phenomenon in Nature.

[1] Translator's Note. Or force.

From the contemplation of the nature of the power, as it has taught us to know it as a divine power, and as it also proves itself to us in our own inner nature, mind, and life, Nature can also be perceived, recognized, seen into, according to its form and the numberless forms and figures in which it appears: Nature also can be penetrated and seen into according to its living, inner, reciprocal references and degrees, as well as recognized according to its outward circumstances and its derivations. Man is led to contemplate Nature by the keen desire, hope, and anticipation of finding, through the knowledge of Nature, the outer unity of the individualities of Nature, that is, of the different natural forms and figures.

Section 68.

But power in itself is a self-active, all-sided influence, having the same action either upon unity in itself or upon a relative unity, but always upon a unity; and, at the same time with the existence of the power, the co-existence of its outward and backward striving is necessarily given and conditioned.

All individuality and manifoldness as such show, however, besides the power, a second necessary outward limitation of the form and figure, viz., the material. They show that each earthly natural formation and form is born from the material which is fully adequate, which on every side bears similar relations of coherence and consistence, and which is therefore in appearance extremely movable. All earthly forms are born of this material through the power everywhere symmetrically dwelling within it, each part of which power resembles every other, and through and under the outward influence of the sun, of the light and warmth, in accordance with the pervading great law of Nature — that the general calls into existence the particular.

All individuality and manifoldness of the forms of Nature, every inner perception of Nature, shows that material and power are inseparably one.

Material and the spontaneous power which, proceeding from one point, acts equally on all sides, reciprocally condition each other; neither exists nor can exist without the other, indeed, strictly speaking one cannot even be thought of without the other.

The cause of the easy movability of the material is the original spherical tendency of the indwelling power, the original tendency of the power to develop and represent itself, spontaneously proceeding from one point and with like action on all sides.

Section 69.

Now the power develops and represents itself in all directions in an all-sided, free, and unimpeded manner: therefore the appearance in space, the incorporate result of it, is a sphere. And so the spherical, or, in general, the corporeal round form appears pervadingly to be most commonly the first as well as the last natural form; such as the great heavenly bodies, suns, planets, moons; such as water and all fluid bodies, air and all gaseous forms, and the dust (the earthy in its finest pulverized form), each in its individuality.

With all the manifoldness, and with the apparently incompatible difference of the forms of Nature, the spherical form appears to be the original form, the unity of all the natural forms. Therefore even the extensive corporeal sphere is like none of the other forms of Nature, and yet bears within itself the nature, the limitation, and law of all. It is the formless, but, at the same time, the most formed.

No point, no line, no plane, no side, is predominant in the sphere; and yet it is made up of points on all sides; it bears within it all points, lines, etc.; it bears within it not only the condition, but even the actuality, of all earthly forms.

Therefore each and every formation of the working, living, and active objects of Nature, has its foundation in the law of the spherical; each, considered as a result of power, and proceeding from the consideration of the nature of the power, has its foundation in the tendency, necessarily existing in the nature of the power as such, to demonstrate by material the spherical nature of the power in every possible peculiar way, in all possible forms, ramifications, and connections.

For in and with the spontaneous working of the power, which has similar action on all sides, is at the same time given within the different sides and directions (as a phenomenon of Nature, and so connected with the material) an inward fluctuating and undulating weighing and measuring tendency, different quantity of the working of the power, and different tension of the power on different sides and in different directions.

This differing relation of the quantity and strength of the working of the power on different sides, which exists at the same time with the power, and consequently also with the material, and necessarily existing in the nature of the power as a phenomenon; this precise, predominating action of the power in definite directions; this definite,

peculiar relation in the different directions of the power among themselves and to one another; this different tension of the power in different directions, and the various symmetrical separation of the material rendered necessary, and at the same time conditioned thereby, — must, as the principal property of the whole mass of the material, indwell in equal measure in each, even in the smallest point of this material.

This peculiar relation and inner law of the working power is in each particular case the essential cause of the precise form and figure.

The fundamental law of all forms and figures lies in this various relation of direction and quantity of the working of the powers, in this various tension, and in the consequent easy separability of the material in these planes and directions of tension.

The possibility of recognizing these forms and figures with respect to their nature, relations, and coherence, lies in the clear perception of this law.

But since, now, each thing makes itself completely known only when it represents its nature in unity, individuality, and manifoldness, and so in and by the necessary triune way; so, also, the nature of the power makes itself fully and completely known only in such a triune representation of its nature by and in formation, in which the two other tendencies of Nature (to represent the particular by means of the general, and the general by means of the particular; and to make the internal external, and the external internal; and to represent unity for both, and both in unity) are at the same time conditioned, and from which they proceed as a necessary continued development.

In this triune representation of the nature of the power in union with those general tendencies of Nature by material and in formation, each individual form of Nature, and thus the manifoldness of Nature has its foundation.

Section 70.

But one and the same power works in one and the same material, either dismembering in many single phenomena, or it works generally undivided; or it works within its law of formation either predominantly toward one or the other relations of extension of height, length, and breadth, and thus conditions various appearances of the fixed (the crystalline) forms, — such as the fibrous, the radiate, the granulous, the leafy, the laminated, as well as the membraneous, and

needle-formed, etc., formations. The former is caused by the fact that so many individual points of the material strive to represent their law of formation as is only possible within a relatively large mass, but by their mass itself reciprocally hinder the formation and perfection of their crystals. The second is caused by the fact that the law of formation strives to represent itself prevailingly and predominantly in one or several common relations of extension.

A pure and complete crystal, which represents also outwardly the relations of quantity of its inner direction of power by its figure, is formed when all the different parts of the material and all the individual points of the acting power which has appeared, or is appearing, subject themselves to the higher law of a common requirement and collective representation of the law of formation, which indeed limits and chains the individual portions, but gives the greater completely-formed result.

The crystalline is the first appearance of earthly formation.

Through the outward and backward tendencies which arise at the same time with the existence of the power, and by the co-existence of the two, a tendency toward the predominance of power toward some side or sides of the direction of power and a reciprocal obstructing, pressing and chaining is conditioned, and consequently also the finest relations of tension of the material on all sides and in all directions, which causes greater or less separability in these lines and planes of tension.

Therefore the first solids must necessarily be bounded by straight lines; indeed the resistance to the common subordination to the definite law of a precise solid, to the complete representation of such a solid, must show itself in the first appearance of the solid.

Also solids with unequally acting directions of power will appear earlier than those with equally acting directions, and so the outward manifestation of power will not be a solid all sides of which are alike (the which lay in the nature of the power), but rather, connected with the solid, forms which have not in common with it the like action on all sides which lies in the nature of the power.

The development of the nature of the power will also rise in the phenomenon of the fixed form, from the unlike-sided to the simplest like-sided solid, as the nature of the power to represent itself outwardly descends from unity and all-sidedness to individuality and one-sidedness.

If we now seek to recognize and represent this descent from unity to individuality lying in the nature of the power, we shall view Nature

at this stage with respect to its inner tendency as well as its outer appearance, we shall view it in all its individuality and one-sidedness, but also in its unity and all-sidedness.

Section 71.

In the whole natural course of the development of the solid as it goes forth from the objects of Nature, there is a very remarkable accordance with the development of the spirit and mind of man. Man, also, like the solid, while vividly bearing unity within himself, shows at first more one-sidedness, individuality, and incompleteness, and not until a later stage of existence does he rise to and attain like-sidedness, harmony, and completeness in outward appearance.

This phenomenon of the parallel in the course of the development of Nature and of man is, as well as every phenomenon of this kind, highly important for self-knowledge, for the education of one's self and others; for from it light and clearness spread over the development and education of man, and give security and firmness of action in the individual requirements of this development and education.

Also the world of the solid is, like the world of the mind and spirit, a glorious, instructive world. What here the inner eye sees within, the inner eye there views outwardly.

Section 72.

All power which makes itself known in the greatest generality by formation and expression works out from a middle with an outward and backward tendency at the same time, and thus, setting its own limits, works in an all-sided, like-sided, or radiating, linear and consequently spherical direction. But the necessary appearance of the power which, unobstructed, makes itself outwardly known in all-sided, like-sided formation, is that the power always works toward two sides in the like direction, and that, within the totality of all directions of power, each three such directions proceeding from the centre on two sides always stand in equal inclination and declination toward one another, bearing thus such a relation to one another that self-dependence and mutual dependence are in equilibrium. Yet on account of the measuring nature of the power within the sum of the three rectangular dual directions, three exclusively come out as predominant and quite independent of all others, and this must take place also in the most spiritual view of power, because it is conditioned alike in the nature of power and in the law of activity in the human mind.

The effect of the predominance of these three times two rectangular directions which symmetrically subordinate and determine all other directions can be only a solid bounded by straight lines and straight surfaces, — a solid which in all its phenomena, parts, and expressions makes outwardly known in manifold, peculiar ways the inner nature and effect of the power, conformably to the great law of Nature, and the precise vocation and destination, the precise aim of Nature. Such a solid can be only a cube, a pure hexahedron.

Each corner shows the rectangular position of the three dual directions within, and thus shows outwardly the middle point of the whole, and this is shown eight times by the eight corners of the cube. Each four corners together show this law quadrupled. In the same manner the three times four edges show each of the inner dual directions quadrupled. The six surfaces show in their centres, invisibly yet visibly, the six ends of the three dual directions, and so, in like manner limited and determined thereby, they show the invisible middle point of the whole solid, etc.

But now in this solid, the cube, the effort of the power toward spherical representation, appears at its greatest strain; instead of all-sidedness appears single-sidedness; instead of presenting all points or all corners, the cube presents individual corners; instead of all lines, all edges, it presents individual edges; and these few points, lines, and surfaces hold all the rest subordinate to and dependent on them. But by means of these points, etc., there becomes clear and outwardly perceptible the tendency already conceivable from the nature of the power, and necessarily leading back to it, not only to represent itself as a body occupying space, but in each of the most peculiar forms possible to it, therefore also as a point and in points, as a line and in lines, as a surface and in surface. But consequently and necessarily there is at the same time given the tendency of the power to develop the line and surface from the point, to represent the point as line and surface, the line as point and surface, to draw the lines together as it were to points, and to unfold them to surfaces in like manner, and to draw together the surfaces to lines and points, or to represent them as such.

This occupation, this activity, and this effect of the power, appears from this point on, in every, even the smallest, advance in the contemplation of the solid, so that the efficiency of the power within the sphere of the formation of solids appears to consist only therein; and all solids, whatever they may be, appear to owe their existence only to this exclusive tendency.

But so it must be. This is the first general presentation of the great laws and tendencies of Nature, viz., to represent each thing as unity, individuality, and manifoldness; to generalize the most particular, and to represent the most general in the most particular; and, finally, to make the internal external, the external internal, and to represent both in accord and union.

If, now, we never forget, or rather if we have ever kept before our eyes, the fact that man also is wholly subject to these great laws, and that almost all the phenomena of his life, even his adventures, etc., have their cause in these laws, we shall through these views recognize Nature and man at the same time, and learn to develop and educate man in a way which is faithful and conformable to Nature and to his nature at the same time.

Let us now quietly advance, step by step, from the contemplation of the cube to the contemplation of all the remaining solids, and to their derivation.

The points and corners of the cube will strive to form themselves into surfaces, and represent themselves as such; the surfaces to represent themselves as points; the six dual middle directions (invisibly resting in the cube, and invisible yet visible in each of its sides), which are at the same time required and limited by the predominance of the three equivalent dual directions, will especially strive to become outwardly visible, and thus to come out as edges, etc.

The result of this is a solid with the like cubical law, which has as many surfaces or sides as the cube has points or corners; which has as many points or corners as the cube has sides, and just as many edges as the cube, but in the middle directions: the result is a pure octahedron.

In this solid again appear several things outwardly either merely visible, or invisible yet visible, which remain invisible in the interior of the solid; but your own perceptions must find these by the indications given with the cube.

Each of the three times two principal directions of the power comes out externally in the cube as three times two sides or surfaces; in the octahedron, as three times two corners or points; another solid must now necessarily be given in which they appear as three times two edges or lines. In the cube the six ends of the three dual directions of the power appear as six sides or surfaces; in the octahedron they appear as corners or points; there must now necessarily be given another solid in which they must appear as edges or lines, and this is

the pure tetrahedron. Its nature is already sufficiently defined by its grouping and comparison with the cube and the octahedron; and the interior, which it expresses by its exterior, is easy to find out by the guidance of the cube.

So from the contemplation and perception of the necessary effects and products of the spherically acting power, which makes itself known by formation of the material, have proceeded three solids, bounded by straight lines and straight surfaces, of which the cube is the first, and, as it were, the middle; the tetrahedron and octahedron are the second, and, as it were, in one respect, the side or adjacent bodies.

If we now look over

Cube

Octahedron and Tetrahedron

in their natural position, which necessarily proceeds from their derivation, so is shown again, in complete accord with the course of contemplation up to this point, and as a necessary result of the repeatedly-expressed laws of Nature, that the cube rests on a surface, the octahedron on a point, and the tetrahedron on a line; and with each of the three solids the axis of the formation necessarily coincides with one of the three principal directions.

These three solids, now considered as completely self-contained, independent bodies, and each seeking in itself the point of rest and support, left to themselves as bodies, show the cube always symmetrical, constantly resting on one of its surfaces, which becomes its base; and the axis constantly coinciding with one of its fundamental directions. The octahedron and the tetrahedron, on the contrary, will fall. Thus each one of their sides will become a base, and, at the same time with this peculiarity, both solids show a new peculiarity unshared by the cube, viz., the axis, the vertical or middle line of the solid, does not throughout fall in one of the three fundamental directions, but indifferently between all three.

Since, now, the nature of the octahedron and tetrahedron rests wholly in and is one with the nature of the cube, and since the form of the octahedron and tetrahedron proceeds from the form of the cube, the property common to the two former, that the axis or vertical line may fall indifferently between the three fundamental directions, must necessarily also lie already in the cube, and this property comes out also through the efficiency of the law of equilibrium ruling in Nature; for the falling of the octahedron and tetra-

hedron so that the axis or vertical line comes to lie indifferently between the three principal directions will, in the case of the cube, condition and necessarily require such a descent.

The cube now appears resting on one of its corners, so that the vertical line or axis now runs from this corner through the middle point to the opposite corner, and so now no longer in one of the three principal directions, but likewise falls indifferently between them. Thus as the cube by the alteration of its axis became quite different, it also outwardly represents thereby a quite new appearance, a quite new form. Two and two sides, two and two, or four and four edges and points, appeared always to belong together, all advanced in the even numbers of two and four; all now appear to belong together in three and three: —

three and three sides,
three and three edges,
three and three corners.

Instead of the two now appears the three, and a quite new series of solids appears thereby at once given and determined in Nature; but the consideration and development of these must be preceded by the consideration and development of the solids with three fundamental directions.

By the effort of the power expressing itself by means of itself and the solid to form corners into edges or sides; by the effort to contract edges into corners and to form them into sides; by the effort to represent sides as edges and corners; by the effort to make outwardly visible the directions, points, lines, and planes hidden within and invisible, and outwardly invisible yet visible, and to represent them as such; by the effort of the solids to outwardly represent in this way the inner, like-sided spherical nature of the power which acts equally on all sides, and thus the effort of these solids to form themselves again to the spherical form, — three series of solids proceeding from the cube, the octahedron, and the tetrahedron are definitely given, which in different directions are in a net-like manner connected with one another, but which through a small number of principal members, and a mass of secondary members which can yet be reached by the eye, soon again represent from themselves forms similar to the sphere, and pass over into such forms.

With the formation of all the solids which have been hitherto mentioned the three principal directions were always also equally active and determining.

In the further-continued formation of the solids the introduction of a difference between three equal principal directions is necessarily conditioned by the advancing and receding given at the same time in and with the nature of the power, and by the precise relations of the tension of the power (and so of the material given at the same time with the power), which are rendered necessary thereby, according to the self-existing law.

This necessarily given relation of difference of the three principal directions must be that the one of the three principal directions which coincides with the axis of the solid is unlike the two others in its equivalent similar directions, and either greater or less than the others.

In the series of the solids proceeding from the first relation, four-sided columns and elongated octahedrons, and, in the series of the solids proceeding from the second relation, four-sided tablets and compressed octahedrons will constitute the principal solids.

Since here we are speaking only of the necessary inner fundamental relations of the power and its effect, all varieties of extension of the solids dependent on outer relations of extension of the material are necessarily beyond our consideration and regard.

The formation of the two series of solids just defined continues to advance from four to four, and in numerical relations determined thereby, — solids having four members.

As in the preceding, only one of the three rectangular directions is always unlike the other two which are alike, all three directions can be and are unlike. The solids, which in their appearance and formation depend on this, will have for their principal forms rather long, four-sided tablets and octahedrons, with three different planes of intersection.

The formation of the two series continues to advance here by two and two and two, and, in the numerical relations thereby conditioned, — solids whose members are in pairs. But the formation now continues to advance in members having the same name, having like sides and conforming to the same law, or having unlike sides. The former conditions the above-defined series; the latter conditions series of solids, which may be defined as two-and-one membered and one-and-one membered.

The further formation of these solids proceeds according to the law and effort lying in the nature of the power to represent the development of the corners to edges and surfaces, and *vice versa*, and thus in the effort to represent outwardly the inward directions of forms

similar to the sphere. All the solids proceeding from these relations of the three fundamental directions are very peculiar in their appearance and formation, on account of the peculiar fundamental determinations.

So, now, the fundamental conditions of the knowledge, perception, and derivation of all solids with three equal principal directions, are given as well in accordance with their individual appearance as with their reciprocal, net-like, allied relations.

Those solids whose axis of formation falls indifferently between the three fundamental directions, and whose fundamental form is the already recognized cube now resting on its corners, now require further consideration.

Besides the peculiarities already recognized, — even at the first appearance of the cube in such position that the axis of formation now falls from one corner through the middle point to the other corner, and so the first corner lies in the vertex and the other in the base of the figure, — which are limited, by the way in which the numbers belong together, to three and three, there come out with further consideration other peculiar laws of formation, and peculiar properties dependent on these laws.

First of all, with the merely outward consideration of the cube in this position, comes out the peculiarity that the six bounding surfaces now no longer appear as six pure squares, and therefore with equal cross-lines, but as symmetrical quadrangles with cross-lines of different length, therefore rhombs, which here in the beginning appear outwardly, but with the next step of formation and continued development of these series of solids are immediately introduced outwardly, but proceeding from inner limitations.

Therefore all the figures of this series of formation bounded by six equal surfaces are always bounded by six equal rhombs. The fundamental form of this series of formation is, therefore, the rhombohedron, and the fundamental determinations and fundamental law lying in the rhombohedron are the fundamental determinations and fundamental law of all the formations which now follow.

The multitude of the solids developing from the rhombohedron is very great, almost incalculable. However, they divide immediately from their fundamental form into several series, each of which again is headed by a principal form conditioned in the fundamental form.

The three edges at the base, and the three at the vertex, form themselves to surfaces according to the already mentioned working

law, invisibly in the interior, or invisibly yet visibly in the external directions, until they set bounds to each other's development. The product is a solid bounded by two times six surfaces uniting in the base and vertex of the figure with equal upper and lower edges. It is the double-pointed, equal-edged dodecahedron.

The side-edges, according to inward determinations, form sloping double surfaces. The product is a solid likewise bounded by two times six surfaces uniting in the vertex and base of the figure, but not with equal edges at vertex and base, but only with double alternate equal edges at vertex and base. It is the double-pointed, three-and-three-edged dodecahedron.

Proceeding from the rhombohedron, or from the two defined double-pointed dodecahedrons, two new solids are determined by the formation of the side-corners or the side-edges into surfaces, according to the direction of the axis, and by the formation of the end-corners into just such surfaces. These new solids are two hexahedrons which have straight end-surfaces, but, according to their inner nature, and therefore also according to their origin, have this difference, that the one column belongs to the side-edges, and the other to the side-corners, of the principal body; and they are therefore also distinguishable as six-sided edge-columns having straight surfaces at both ends, and as six-sided corner-columns having straight surfaces at both ends.

According to this inner coherence here indicated, the fundamental and principal forms stand to each other as follows: —

Rhombohedron.

Double-pointed,	Double-pointed,
equal-edged,	three-and-three-edged,
dodecahedron.	dodecahedron.
Six-sided,	Six-sided,
straight end-surfaced,	straight end-surfaced,
corner column.	edge column.

According to the repeatedly expressed and applied laws of Nature, according to the laws of the self-representing power to form points as surfaces and edges, and *vice versa*, according to these and other necessary limitations, there develop from the prominent fundamental and principal solids derived from the nature of the power in increasingly strict legitimacy, all the three-and-three membered solids already thus given and determined, with all their immediate transition-forms and connecting forms. More and more spherical solids result from this development.

And thus with the three-and-three membered solids (which are necessarily given by these determinations, but which in their connections form an innumerable multitude) combined with the solids already conditioned in the three fundamental directions, each individual solid is already given and conditioned, and so the province of solids is complete. Yet all the different individual figures given by the law hitherto recognized can and will develop in accordance with the general workings of the power and other particular, peculiar limitations in different relations of extension, therefore with predominating length, breadth, and thickness, though always simply. For the solids, which hitherto proceeded from the nature of the power, are always only simple and single, yet, in consequence of the effort to represent from itself solids bounded by straight lines (an effort given indeed at the same time as the power, but just on that account conditioning higher development of it), the totality of the original power, striving to work on all sides with equal action and alike at every side, has come into such tension, and especially such outer and inner opposition, that it becomes, even externally, the first effort of the power to equalize this tension, and annul this opposition in every possible way.

The first and simplest outward effort within the limits of the representation of the solid is to form from itself, and to represent, figures in purely opposite position and direction. The result of this will be figures which combine the two, three, four, and even more single solids in opposite and thus comparing directions and positions, into an outwardly single collective form, and in the latter case to appear as lawless accumulations of the inextricable law of union.

With these latter formations originate a whole new series of compound and aggregate figures which appear as the imitation of the figures of higher stages of formation, as clustered, budded, spherical.

Through these last-named aggregations, each individual form appears again especially to represent outwardly one of the all-sided directions originally working in the power, and so they (the aggregations) in common seem to represent that which is impossible to the individual, — the form of the original sphere.

So also, at and in this stage of the formations of the solids, life appears as in a symbol; and, with all the inflexible difference, there is shown an inner, living coherence, and especially the similarity and unity of laws as they come out more and more clearly at each following stage of the development of Nature.

Now all these forms and figures (which, as outward phenomena,

belong pre-eminently only to the world of material, to the world with only working power), whose outward *unit*, and, as it were, outwardly creating unity, is the sphere, — show in common the great peculiarity that their members are only multiples of *two* composed of an even number of members, and multiples of *three* composed of three and three members. On the other hand, the efficiency of the directions of power according to and in the laws of number, wholly excludes the *five* and *seven*, and for the same reason the two (four) and three (six) and all figures thereby conditioned, since the five and seven appear either only subordinate and not pure, or only accidental and transient.

Farther: all solids appear in themselves wholly of the same material, without a necessarily conditioned and abiding middle, but always a referential middle, and therefore a middle annulled also by the annulling of the reference; therefore the effect of the power with equal material, and with material which remains equal, is heightened only by increase of material. The working power, therefore, appears also as simple, having members, but not as a unity including a manifoldness.

Hence the development and representation of the power at the stage of production of the fixed solids; hence the stage of the development of the power within the limits of these forms. Yet the nature of the power as a self-active nature, with equal action on all sides, demands necessarily (besides what was already recognized from the nature of the power even in appearance in its outward representation in form) not only what the fixed solid gives, — a referential, changing middle, annulled with the annulling of the outward condition, but a definite middle, necessarily given by the nature and effect of the power, — an abiding point of reference for the out-going and returning of all expressions and all activities of power, a point also perceptible in the figure, and not merely a point of union, but also the bearer, and the determining point of the power.

But the province of the fixed solids does not show such a uniting point; the fixed solid cannot possess it (since the one absolutely excludes the other), however inalienably it is conditioned in the nature and in the development and cultivation of the power which leads to completion.

But the representation of a figure corresponding to that point is made impossible likewise by the material, conditioned by the law of the solids, bounded by straight surfaces, — the material, which is therefore stretched even in its smallest particles, fixed in form, and com-

posed of parts; for the material, all the parts of which are everywhere alike, absolutely excludes as such the predominance of a single middle point of power and of reference for activity, or of several such points. But therefore the introduction of a point of union and reference, of a middle point of the power, conditions just as absolutely a complete dissolution of the connected parts, of the state of connection, of the solidity of the material, of the solid.

The power as such in its development and cultivation further conditions and demands a plurality of expressions of power and activities which proceeded from unity, and are under the limitation of unity; since it could not at all otherwise raise itself to independent power.

It cannot, therefore, suffice to the nature of the power, and to the efforts to its complete development and representation accompanying it, that it should only be different in action on different sides; its fundamental effort demands that it should be in itself membered; demands under the condition of unity (having proceeded from, and therefore being dependent on unity) an association of powers, each of which has independent action, but only for the collective representation of that which is conditioned by unity.

But the power which is thus in itself composed of parts requires and conditions a material similarly composed.

But the material, which at each place assigned to it by the activity of power proceeding from and conditioned by the unity of the power, is able to correspond to the individual and collective demand of the power, is necessarily in itself composed of members. Material is membered, which with equal readiness subjects itself to the demand of the membered power, whether this demand be for representation of the general or particular, the inner or outer, or for whatever side and direction of the power.

Material composed of members conditions a perfectly free and unobstructed, all-sided determinateness; but material which is in itself tense, solid, the sides of which differ, excludes this: therefore, in power which is itself membered, the different-sided condition of the material is wholly annulled, and it is raised to the state of being composed of members.

Different-sided material can only be fitted for, and pass over into, a higher stage and gradation, it can only become membered material by sinking back into a perfectly dismembered condition, in appearance wholly without coherence, — a condition of the most extreme dissolution, — and by becoming powder.

In this necessity also the requirements and conditions of the highest and most spiritual life show themselves as in a type; therefore at this stage of development of Nature the knowledge of and insight into the character of Nature is highly important for the education of one's self and others.

Section 73.

The outward and backward tendency of the power comes out at the same time with the existence of the power as one with it; for one is indeed absolutely conditioned with the other and by the other.

But now the power, developing a manifoldness from itself as from a definite perceptible unity, and referring the manifoldness to the unity, necessarily conditions thereby an *alternating* outward and backward tendency of the power; and as this tendency breaks up and annihilates the fixity of the material, so it also destroys the *co-existence*, as it were, the reciprocal relation, of the outward and backward tendency; conditioning on the other hand, as proceeding from and referring to a definite and perceptible middle, an instantaneous separation and an instantaneous reunion, and thus outwardly an instantaneous different and separate advance and receding of the power, and a fluctuation and undulation of the power perceptible in and by means of the material.

In the solid the advance and receding is one at each instant, is an indivisible unity, and therefore the solid appears fixed. The separation of this co-existence, and the slightest predominance of one or the other action of the power, immediately destroys the fixed condition of the solid, and thus the solid itself, and represents it as earthy, fluid, or gaseous. But since the greater freedom and independence of the power, and yet the greatest co-existence of the outward and backward tendency condition the greatest perfection of the power, the power will have attained its greatest independence at that stage where the advance and receding alternate most quickly.

But this constant advancing and receding has its cause in a constant equalization, therefore a moving plane: this stage of the power, proceeding from and going back to a unity, — a precise, perceptible point, — is called "life."

This point, as bearing this independent, self-active life in itself, and breathing it out, as it were, to separate manifoldness, is therefore significantly called the "heart-point."

The next new stage of the development of the power (to the

power working only in and for solids) is the more perfect formation conditioning the life-point, the life conditioning the heart-point.

In complete accord with the nature and requirements of the power, several, or but few, or only one, of the points of the activity of power, strive to rise to heart-points in the material. This is one of the most direct causes of the separation of the life-form. So the power strives to make itself more and more independent of the material, and more and more self-dependent, so that now the greater or less action of the power, the greater or less *expression of life*, no longer necessarily depends on a greater or smaller mass of the material; this is a prevailing appearance of all forms, and of all formation in which *life* expresses itself.

In accordance with this fundamental law, all life-forms immediately on their first appearance separate into two series: one in which the appearance of life is subordinate to the material; the other where the material is subjected to the activity of life. The latter series of forms is rightly called *living:* the former, bearing life within itself in self-acting movement, is said to be *lively, active.* So, proceeding from this side of the consideration of the nature of the expression of power, all natural objects arrange themselves thus:—

Living,	Working, (Solid)	Lively.

Since life always conditions and demands repeated turning back of the activity to the centre of the power, the heart-point, indeed consists in this returning, and creates in and by this return new power of the outward existence, so necessarily all life-forms increase, and really *grow* from within outward.

This necessary, and therefore, as here and hitherto indicated, inner coherence of the working, living, and lively, proceeds clearly also from another side of the consideration of Nature, and from the general law of Nature that the general is demanded by the particular, that the general proceeds from the particular, that the particular demands and conditions the general.

Since, now, the before-recognized and developed properties of the power necessarily lie in and proceed from its nature as necessary results, they must necessarily also have their continued existence with the continued existence of the power, and with like necessity must definitely express themselves in the following stages of the development and cultivation of the power, though in different form, connec-

tion and gradation, and advanced figure, but in accordance with the nature of the thing. This requirement, necessarily proceeding from the nature of the power, will now inalienably express itself in each form of the figure conditioned by its advancing stages of development, and will be the inner determining cause of the form and figure. Therefore the figures of the next two recognized defined stages of development will immediately show the peculiarity that, as in the solid the circular and revolving appeared as subordinate, and as it were accidental, it now appears in the life-form as essential, yet with the distinction that in the living forms of Nature the radiate, and the flat dependent upon it, appear as prevailing and predominant, but the revolving and spherical as subordinate. With the active forms of Nature, on the contrary, the radiate and that which depends upon it will be the subordinate, and the revolving and circular the predominant.

As, now, the membered power necessarily demands and conditions a membered material, both demand and condition a membered form; and therefore the living life-forms, the vegetable forms in which the life is still subordinate to the material, will be more radiate in their formation and approximating to the law of the solid, and will represent this law in an advanced membered condition, and in life and with life.

Hence in so many plants there is still the pure expression of the solid, the expression and representation of the fundamental law of the solid, which here makes itself known, especially through the relations of number.

Number originally denoted the extreme, the end, as many ancient combinations of words still attest. Therefore the relations of number in the plant-world appear so important, because they denote, as it were, the ends of the directions of power to which the solids, and each future advanced appearance of the solid, owe their peculiar forms and figures. As the solids having equal members and the solids having directions of equal importance and even-numbered members have a peculiar, and in a certain respect very simple character and expression of life, so the plants which have equal numbers and an even number of members (two and two) have a similar expression of life, and, as was already the case with the solids, they especially point out the three-and-three membered plants in contrast.

The two-and-two membered plants express this law clearly and precisely, as well by the alternating position of the leaves as by the

two-and-two surfaced form of the stalk. Peculiar properties which are always existing also express themselves with the peculiarity of the existing relation of number; so particular inner properties continually connect themselves with each particular expression of number, and with its particular and peculiar manifestation; so, for example, the plants belonging to the numbers two and two almost universally give out very strong aromatic fragrance.

The life-forms, however, by no means content themselves with more individual representation of the relations of direction originally given and the relations of number directly dependent on these, which limit the solids; but higher activities in the relations of formation make their appearance together with the activity of power increased to life, an activity which has its foundation in the analyzed external relations of tension; and so with life and the life-forms, as well with plants as with animals, the relation of number of the five, which with the solids appears only extremely subordinate, almost only accidental and transitory, appears here early as ruling and powerfully active.

As a manifest, peculiar efficacy shows itself with the introduction of the relation of number of the five in all the natural objects in which it appears, the manifestation of the five and the conditions of its manifestations are remarkably symbolic and full of significance.

Widely as its appearance is extended in the vegetable kingdom, the five rarely comes out pure; that is, so that all the individualities of the five are of equal importance according to the position, the form, and in general the value; and, if its most external appearance is indeed pure, it is so changing that it only remains actually the same in some few phenomena.

This attests plainly its origin, which has its foundation only in the chained efficiency of the power, in the effort of the power now raised to life, to represent each relation by and from itself.

Since the representation of the five, and of the seven, which is akin to it, as independently determining and continuously developing, is wholly excluded from the merely acting power, and hence each following development and phenomenon of the activity of power is conditioned only in the power as working, this representation can only originate in a separation, or in a drawing-together of relations of direction and of the relations of number proceeding from these, which relations are conditioned by the acting power.

And so it is: the five appears in the plant-world either by the separation of one of the fundamental directions of the four-membered, or

two-and-two membered, or by the drawing-together of two fundamental directions of the three-and-three membered.

Almost all plants which have the expression of the number of the five attest this.

Plants, therefore, which show almost no change of five in their blossoms, are to be considered as belonging to the pure five; plants which belong to the inner law of the two and two, and represent the five in their blossoms, will show it as two, two, and one, since it proceeded from the separation of one of the equally important directions: therefore four of the members always belong together in pairs, and one stands alone, and will develop thus through all the forms and connections of the flower-formations belonging to the five.

Such plants then appear as representations of the law of the two and two passing into the two, two, and one.

In general the phenomena of the five which have proceeded from two and two fundamental directions are the most manifold in form and connections, as is shown by all plants with alternate leaves.

The arrested equilibrium between the two and two can only with difficulty be again attained.

It is quite otherwise with the plants, the expression of whose forms and especially of whose flowers proceeded from the law of three and three. The five has here originated, not by a separation of one into two, but by the union of two fundamental directions into one, and the security and rest which, as it were, proceeded from the union and drawing-together are expressed even in the simplest flowers. One example will suffice, — the rose.

The five therefore appears in Nature at the stage of the life-forms as the number which unites the nature of the two and the three. The five appears separating and uniting as three and two, therefore, as it comes forth with the advance of merely working power to the living and active, it is also truly the number of the separating and uniting life; it is the number of reason at the stage of the forms of the living, of that which incessantly and interiorly produces the new from itself, of that which in itself is always advancing. For it appears so much the more abiding, the higher the stage of development of the life-forms. At the stage of plant-formations, first of all, the almost pure five belongs to those plants which bear within themselves the greatest perfection and manifoldness. Hence the kinds of fruit, kernel and stone fruits, and the tropical fruits belong to the law of the almost pure five.

Are not the first capable of numberless improvements and developments?

Do not the roses, which belong to the five, proceeding from the three and three, show the like in the flower-world?

Are not their varieties capable of being more and more increased?

Does not almost every region bring forth a new variety of the potato? And how much these varieties have already developed since they have been known!

So it is again those plants which by their blossoms belong to the almost pure five, which most easily multiply themselves and increase, such as the roses again, the pinks, auriculas, ranunculuses.

So a higher expression of heightened and advanced life expresses itself unequivocally where the number five appears, to which the number owes its existence by the separation or union of that which is strictly and fixedly determined by the rigid law.

Proceeding not from the outward phenomena of the number, but from the deepest, most inward limitation, unity, and nature of it, in which all number, and the manifoldness and relations of number are necessarily founded, the following urges itself upon our notice: as the solids, the parts of which are straight and equal, appear only simple, making known but little of the manifoldness of the power, like formations of the mind as it were, the three-and-three membered solids on the contrary appear, in consequence of their continuing outward separation, in ever new forms to resemble, in their manifoldness, formations of reason and consciousness. And as in all three-and-three membered solids, the axis of formation separated from each of the three equally important fundamental directions, and thus established itself independently as of equal importance in relation to all three, the development goes on almost endlessly outwardly separating and outwardly connecting. Consequently there is nothing which the three-and-three fundamental form cannot separate; even the light must subject itself to the outwardly separating power of this form, as in the calcareous spar, and in a three-and-three membered artificial form, — the prism.

Therefore also at the stage of the solid, the act of falling from the law of continued formation and development with like action on all sides and on equal members, into the three-and-three membered, resembles the falling, or, what is in effect here similar, the descent of the spiritual part of man from the purely harmonious development of mind into the outwardly separating and doubting cultivation of rea-

son; for the three-and-three membered first introduces the descent of the solid in the circumference of the outward knowledge of forms.

In reference to the peculiar nature and peculiar effects of the power as living and in itself one, the plant-world shows the following phenomena: through the different stages of gradation of one and the same living power in a living form of Nature — a plant — each part of the whole appears to be in possession of the whole power, only in different degrees of gradation; hence at the stage of the life-forms (the plants), it is so frequently possible to call forth the whole form, the whole plant, from a single part — a bud, a leaf, a piece of root.

Hence, also, in the vegetable world appears the phenomenon, expressing itself as a fundamental law of plants, that each following stage of development always makes known in greater measure the nature of the unity which is working in the form, as each following stage of development is an advance on the preceding; thus the petals are developed plant-leaves; the stamens and pistils, developed petals. Each following formation represents the interior of the plant, the nature of it, in more and more delicate coverings, and lastly, as it were, in breath and fragrance.

The inner (thus become almost wholly outward) again takes up the germ into itself, and thus again represents it as inward.

Up to the blossoming-time the plants express an outward striving, an uprising; from the blossom-time up to that of the completely ripened fruit they express the most extreme retraction.

The phenomena of plants show, therefore, not only a manifoldness and ramification of the power, but also an advance; but for this reason also, with the lessening power in the vegetable world comes the frequent phenomenon of a sinking-back from a later stage of cultivation and continued development into an earlier stage; for example, the sinking-back from the formation of the flower-leaves into the formation of the leaves of the calyx, from the formation of the leaves of the calyx into complete plant-leaves, and the sinking-back of the stamens and pistils into flower-leaves; which phenomena are so often shown in the roses, the poppies, the mallows, the tulips, etc. And in the former reference, the artificial development of the calyx of the flower to the crown of the flower, when the plant has an especially good position and especially good food, as with the garden-primrose, belongs here.

So now, therefore, the nature of the whole plant lies in each independent part of the plant, only in a peculiar way. But the

fundamental effort of each thing and each plant is to represent itself on all sides in its peculiarity; so, now, this effort to represent from itself the form of the sphere, appears to be more connected with the leaves than with the other parts of the plant; hence the phenomenon especially frequent with them, but also frequent with other parts of the plant, that after an injury the wounded part strives to represent the spherical by itself, which is shown with especial beauty by the so-called rose-moss on the wounded foliage of the rose.

So the nature of the power increased to life, while outwardly quiescent, shows itself by the plants: therefore the plants, in this respect, seem like the blossoms and flowers of Nature. And as, in the case of the plants, the whole nature of the plant again draws into the interior, into the unity from the time of blossoming and fructification, so, at the now following stage of the formation and development of Nature, the development and advance of the power from life to vivid action into all that is outward and manifold again makes its appearance in an interior and unity, in a seed, in rounded forms; therefore, on account of their simple rounded forms, the lowest forms of animal life are like seeds which have become living.

And thus the totality of all earth-forms, although in itself but a small part of the great whole of Nature, yet relatively a finished, independent, great, membered whole, seems to result from the law of the single repeating itself in mass.

The forms of the power increased to life, the active forms, — the animals, — are also in themselves again a great, membered whole, as it were, a form bearing life in itself; this is made known by the great, general, extended laws of Nature, which also through their whole totality pervadingly express themselves solely in single and individual application.

So a law of the five just necessarily conditioned by the entrance of higher life, and really one with it, expresses itself in the case of all animals with heightened enjoyment of life: and this takes place as soon as these animals appear, or as soon as animals in general appear; which is attested by the remains of the submerged anterior world. Thus the five comes out early, contemporaneously with the life of this great animal whole, abides with it as the fundamental law, although in different kinds of drawing-together and separating; and also with man, in whom the activity appears increased even to complete spirituality, the five is the essential property of his forming hand, his principal member, the principal tool of his forming creative power.

Another great, generally extended law of Nature, which expresses itself with especial clearness in the whole animal world, and represents the just-defined totality of animals as relatively a completed whole, is the law of making the external internal, and *vice versa*.

So the first forms of animal life live in an almost stone house, which is the bearer of the still soft body, and almost independent of it, only outwardly enclosing the creature as something foreign to and separate from it; but the creature is nevertheless bound during its life to the fixed place of its chalky covering.

Later, the animals appear torn loose, independent, no longer chained to one point during life, like a plant; but they and their outer stony covering adhere to one another, so that the covering encloses the body like a firm bark.

With the following animal formations, the cartilaginously stony covering outwardly diminishes more and more; it sinks, as it were, into the flesh, and, in proportion as it outwardly vanishes, it makes its appearance with the fishes and amphibia as a cartilaginous skeleton, leaving its remains on the body in the form of scales.

This cartilaginous skeleton becomes, with the following animal formations, more and more a fixed, bony skeleton; and the more complete this is, the more does the muscular mass before covered by the mass of stone now cover the stone-like bones, and now appears enclosing, as it before appeared enclosed; what was external is now internal, what was only internal is now an outwardly complete animal. Further: the great law of Nature, the law of equilibrium — that is, the law according to which a relatively precise totality of power imprints itself as indwelling in each living and active form, and which conditions a relatively determined mass of material for each body, indeed, for each kind of its parts, and also that when this material is turned predominantly toward one side of the body and limbs, then in the same measure the development of the body toward the other side and other limbs recedes, and thus develops one part or one member of the body at the expense of the others — is expressed with especial clearness in the animal world.

So with the fish, the body is developed at the expense of the limbs.

But this law expresses itself with especial clearness and impressiveness when man, in the symmetry of his formation, is established as the point of comparison; as, for example, the formation of the arm and hand of man compared with the wing of the bird, where the overpowering and predominating development of individual members and

parts at the expense of the others precisely and intuitively expresses itself.

Section 74.

So all manifoldness of the forms of Nature appears throughout as conditioned by one power, as the result of one power through all stages of its unfolding and development. This power originally is and appears as unity, and expresses itself clearly in the completed individual life which has become independent, but makes itself known as an outward phenomenon first on all sides of the forms of Nature, according to each reference, in all the manifoldness of the forms of Nature; for the power demands the possibility of the representation of all manifoldness which lies in it as an association and a life-whole. And so here also is confirmed the truth, as great as it is general, that only in a triune representation each form of Nature completely and perfectly expresses its nature — in unity, individuality, and manifoldness. So the law of development of the solid from the single-sided to the all-sided, from the incomplete to the complete, is repeatedly confirmed as the course of development to and for all completeness of Nature. Thus man is the last and most complete of all earthly beings, the last and most complete of all earthly forms, in which the corporeal appears in the greatest equilibrium and symmetry, and the original and primordial power, resting in eternal existence and proceeding therefrom, appears here as spirituality; and so the man himself discovers, feels, understands, and tries his power; thus he can become conscious, and is conscious, of this power.

But as man as an outward corporeal phenomenon shows the form in equilibrium and symmetry, so desires, inclinations, and passions undulate within him (considering him at the beginning of spirituality as a spiritual being). As powers working in the world of solids, living in the vegetable world, and acting in the animal, undulated and floated, so is it here with the spiritual powers.

And now for the series of the development of spirituality, man stands again upon the first stage on which the solids stand for the development of life. Therefore the knowledge of the laws of the nature of the fixed forms, and consequently of the life-forms, is again exceedingly important for man, — important for his own education and that of others. Therefore the knowledge of the nature and appearance of the fixed forms and life-forms is instructive, guiding, enlightening, consoling, etc. And so, therefore, Nature in all its

manifoldness should be early brought before man, before the boy, the scholar, as unity, as a great active whole representing, as it were, only one thought of God as a figure of life.

As Nature is in itself a constantly developing whole, developing from itself on all sides and in each point, and as it appears as such, it must be thus represented at an early stage to man. Without unity in the activity of Nature, without unity for the forms of Nature, without recognition and perception of this unity, and without recognition and perception of the derivation of all manifoldness from this unity, no genuine knowledge of the manifoldness of Nature, no genuine natural history, and consequently also no satisfactory instruction in the science of the manifoldness of Nature, of the natural history hitherto existing only as a name, can be given to man even in boyhood.

But also it is this unity only which the boy's mind early seeks; it is this only which satisfies the human spirit in general.

If you go out into Nature with the young boy who has genuine life in him, if you bring before him the manifoldness of Nature, he will immediately question you as to the higher, conditioning, active unity. Since this was written, it has been confirmed by the repeated questions of boys who had scarcely entered upon the stage of the scholar, who were employing themselves with objects of Nature.

All fragmentary and dismembering contemplation of Nature (very different from the contemplation of the particular which leads to unity and totality) deadens the objects of Nature and Nature itself as well as man and the contemplating human spirit.

Section 75.

These few indications for the perception of Nature as a whole must here suffice; they are intended only to guide the father, the educator, the teacher, to leading his scholar, his pupil, his son, toward the recognition and perception of the similarity of the laws of Nature in their different stages of gradation, and toward the recognition and perception of the unity in all manifoldness, and to lead the father *et al.* to view Nature as a life-whole. For as the inner vivid coherence of the activity of Nature and the objects of Nature was here indicated in general, and toward one side and direction, so must Nature be brought before the scholar according to each side, direction, and activity, as a different-sided and membered whole; since the

powers, the materials, the tones and colors, etc., as well as the forms and figures, have their inner unity, their vivid inner coherence, in and among themselves and with the whole. Besides, all are dependent, in the completeness of their development, upon the influence of a great uniting phenomenon of Nature, a great determining substance of Nature, — the sun, which awakens and fosters all earthly life. Indeed, it almost seems as if the earth-forms only made known the nature of the sunlight, so eagerly do all earthly forms turn toward the rays of the sun, absorb the sunlight, and hang upon the light and rays of the sun, as the child does upon the eyes and lips of the loving, teaching father, and of the developing, strengthening mother, with whom it is of like essence. And in like manner as the presence and absence of pure parental love, of the formed parental spirit, act upon the development and improvement of the children who are of one essence with their parents, so do the presence and absence of the sunlight act upon the development and improvement of the earthly forms, which are, as it were, the children of the sun and earth. Moreover, it gives us a more exact knowledge of the rays and light of the sun, that the directions acting within it are like the fundamental directions of all earthly forms, and so the earth-forms in their totality might well show, as it were, outwardly, visibly, and in manifoldness, the nature of the sunlight which points to the sun itself as unity. Thus the knowledge of the one leads with certainty to the knowledge of the other.

Thus father and son, educator and pupil, teacher and scholars, parents and child, wander always in a great active whole of Nature.

Father, teacher, guide of children, do not answer, "I myself as yet know nothing at all of this; I have not as yet any knowledge of it."

The question here is by no means of the communication of already possessed knowledge, but of calling forth new knowledge. You must observe the object with the view of knowing about it in order to lead the child to such observation, and to bring that which is thus observed to the knowledge of yourself and your charge.

No special skill in denominating either the objects of Nature or their properties, but only clear, precise, sure comprehension and precise designation of the same, according to the nature of the thing and the language, is needed for the recognition of the prevailing conformity of the laws in Nature and of the unity of these laws.

In presenting the natural objects to the boy, and making him familiar with them, there is no question of the communication of the names of the objects, nor of the communication of preconceived

opinions and views, but only of the pure presentation of the objects, and the recognition of the properties which they themselves demonstrate and express, so that the boy may observe this object as the precise, independent object which it makes itself known to be by its form, etc.

Also the knowledge of the name before given to the object of Nature, or generally acknowledged as authentic, is unimportant: only the clear perception, distinct recognition, and correct designation of the properties, general as well as particular, are important.

Give the object of Nature its local name, or, if you do not know any, give it the name which at once suggests itself, or, what is far better, give it a descriptive, even though a long name, until you can get the common equivalent name.

It will, with this effort, not be very long before the common equivalent and understandable name becomes familiar to you in order to harmonize your knowledge and the common knowledge, and to clear up and complete the former by the latter.

Therefore, school-teacher in the country, do not say, "I have no knowledge of the objects of Nature; I do not know how to name them." However simple your training may be, you can by faithful observation of Nature with the view of learning about it, acquire far higher and more fundamental outer and inner knowledge, more living knowledge of the individual and of the manifold, than you can learn from common books which are accessible to you, and with which it is possible for you to supply yourself. Besides, this so-called higher book-knowledge usually rests upon phenomena and perceptions which the simplest man is in a condition to make; and, indeed, often the observations which he makes with little or no expense are finer than they are shown to be by the most costly experiment, if he have but the eyes to see. He must bring himself to this capacity for seeing by continued observation; he must, especially, allow himself to be led and guided to this by the boy-world around him.

Father, mother, do not be uneasy; do not say, "I myself know nothing; how shall I teach my children?"

It may be that you know nothing; but yet that is not the greatest of evils if you only wish to know something. If you know nothing, do like the child itself; go to father and mother, and become a child with the child, a scholar with the scholar, and let yourself be taught with him by mother — Nature, and by the father, the spirit of God in Nature. The spirit of God and Nature will guide and lead you,

if you will let yourself be guided and led, if you do not say, "I have not studied, I have not learned that." Ye who teach it to the child, go like him to the fount.

Now, one of the objects of the university is, indeed, to make the inner eye see, to open it to the outward and inward; yet it would be sad for the human race, if those only should see who attended the university, or, as you say, studied.

But if you parents make your boys, if you leaders of children make your scholars and pupils, see and think at an early age, then will the high schools again become what they should be, — schools for the attainment of the knowledge of the highest spiritual truths, and schools for the representation of these truths in one's own life and action, — schools of wisdom.

From each point, each object of Nature and of life, there goes a path toward God. Only keep the point in mind and go securely along the path; gain firmness from the conviction that Nature must necessarily have not only an outward general cause, but an inward acting cause (recognizable even in the smallest detail), as it proceeded from and was limited and created by one Being, one Creator, — God, and as it proceeded from and was conditioned by the self-resting, necessary law of the eternal in the temporal, of the spiritual in the corporeal. It must then necessarily be possible to recognize the particular in the general, and the general in the particular.

See! the phenomena of Nature form a more beautiful ladder from earth to heaven, and from heaven to earth, than Jacob saw; not a one-sided, but an all-sided ladder; not in one, but in all directions. You do not see it in a dream, it is abiding, it everywhere surrounds you; it is beautiful; flowers clasp it with their tendrils, and angels look from it with their child-eyes; and it is firm, solids form it, and it rests upon a world of crystals; David, the divinely inspired bard of Nature, sings of it.

If you seek in this manifoldness of Nature a fixed point, if you seek a safe ladder, number is such a fixed point, the path to which it leads is sure; for it is conditioned by the outward appearance of the inner directions of power: so it most directly makes known the innermost nature of the power with that which is dependent on it, if you only bring with you the clear eye of a boy and the simple sense and mind of a child.

If you allow yourself to be guided by the eye and sense of a boy, you can already know for your consolation that a simple, natural boy

does not endure half-truths and false ideas. If you only quietly, judiciously, and thoughtfully attend to his questions, these questions will instruct both you and him; for they come from the yet childlike human spirit, and what a child or a boy asks, a mother, a father, a man, will be able to answer.

You say, "Children and boys ask more than parents and man can answer."

And you are right; but if you stand at the limit of the earthly and at the portal of the divine, and then express simply what you see, the spirit and mind of the child will feel satisfied. If you stand at the limit of only your own knowledge, do not shun the expression of what you see, only beware of speaking as if you stood at the limit of human insight in general, for this, though it cannot kill, crushes and cripples the human spirit.

In these cases, question your own life, compare it with the life outside and around you, lead your little charge to this comparison, and you and he will obtain the answer to your question as soon as your insight is sufficiently ripened. You will not dimly, with perplexed and perplexing mind, but as the human spirit, the human reason demands, with sure, undoubting inner eye, clearly perceive what you seek: you will see God in his works so clearly that your earthly yearnings will be satisfied, and that the peace and joyousness, consolation and succor which you require in time of need, you will find within you.

Section 76.

Man seeks a fixed point and a sure guide (ladder) to the knowledge of the inner coherence of all manifoldness in Nature. What can give a more indubitably sure and unifying starting-point than that which appears, as it were, to bear all manifoldness within it, to develop all manifoldness from itself, that which is the visible expression of all conformity of laws and of law itself, — mathematics, which, on account of this great producing property, is from the beginning called the teaching of knowledge, the science of knowledge, — mathematics?

And it has not only maintained this rank through thousands of years, but still maintains it; but just at the time when it might be deprived of this rank, it has come out with a glory shining forth from its interior, a glory which it has not hitherto enjoyed.

But by what means has mathematics not only reached, but also maintained, this high rank? What is the nature, origin, and effect of mathematics?

As a phenomenon it belongs equally to the inner and outer world of man and of Nature as proceeding from the pure spirit, from the pure laws of thought; and, being a visible expression of these laws and of thought as such, it finds the phenomena, connections, forms, and figures necessarily conditioned by these laws, outside of itself in the outer world, in Nature, as well as quite independent of itself and of the human mind and spirit.

Nature (in the manifoldness of its form and figures, which shaped themselves outside of man, and independent of him in the outer world of Nature) he finds again in his inner nature, in his spirit, in the laws of his spirit and mind.

Thus mathematics appears as uniting and intermediating between man and Nature, the inner and outer world, thought and perception. This great occupation which, as conditioning and conditioned, will last as long as the inner and outer world; this requiting and most grateful occupation, bearing its reward within it — is what for thousands of years, almost since the existence of the human race, secured to mathematics its existence and its acknowledgment; by this occupation, indeed, mathematics was actually first established by the Christian in its true rights, was first truly recognized for what it is. For it was only possible to and reserved for the Christian — who recognizes the one divine spirit, the action and effects of the one divine spirit in all things — to prize it in its whole nature. For only the Christian can declare the unity of the forms produced by the pure spirit, with the forms, figures, and phenomena of Nature. He only can solve the doubt, whether mathematics was deduced from the phenomena of Nature, or the objects of Nature formed according to human laws of thought; in which latter case Nature and the outer world have their existence only in the laws of human thought. For does not the one eternal spirit of God live and work in man and in Nature? have not man and Nature proceeded from, and are they not conditioned by, one and the same single God?

Must there not, therefore, necessarily be union and accord in the spirit of Nature, in the laws of its forms and powers; and in the spirit of man, and in the laws of his formation and thought? Must there not be conformity of laws in both (the spirit of Nature and the spirit of man), and between the two?

Therefore it is possible to recognize the character of Nature from its forms and figures, and to know this character by means of the established laws of human thought become external by mathe-

matics; hence mathematics intermediates, unites, produces knowledge, and directly conditions knowledge. Therefore it is neither lifeless, ending in itself, nor a definite plurality, the sum of outward forms and truths, strung together and single, because found singly and accidentally; but it is a living whole, uninterruptedly re-forming itself again from itself, continuously developing with the development of thought and of the human spirit in respect to unity, manifoldness, and recognition and perception in the most individual particulars; for it is the visible expression of thought in man; it is in itself the expression of the conformity of the laws of the purely spiritual: it is therefore, in this respect, a life-whole in itself, a production of necessity and freedom.

Mathematics is therefore neither something foreign to nor abstracted from actual life, but is the expression of life in itself, and therefore its essence is recognizable in life, and life by its essence.

As thought and the laws of thought pass from unity to manifoldness and all-sidedness, and, though apparently starting from a manifoldness, refer to an originally inner unity, external indeed, yet always lying in distance or obscurity; so mathematics also necessarily passes from unity to manifoldness and all-sidedness. And though it also externally and apparently starts from individuality and manifoldness, yet a necessary inner unity always lies at the foundation. All mathematical forms and figures must therefore be viewed as proceeding from and conditioned by laws lying in and conditioning the sphere and the round, and must therefore be referred back to and considered as unity; but the sphere itself must be considered as proceeding from unity with independent, individual power.

Mathematical forms and figures must therefore not be considered as composed according to outward, arbitrary determinations, but as having originated according to necessary inward conditions, as a product of an independent power which, because independent, worked originally from a middle out on all sides; these forms are therefore not to be considered as separate, but as in a necessary coherence; and, as they also start from individuality and manifoldness, they must always, even in the first instruction, be referred back to this conditioning unity which is all-pervading, like the soul.

Mathematics is the expression of space-limiting, and thus of the limitations and properties of that which is in space. As unity is its cause, it is unity in itself; and as manifoldness of directions, figures,

and extension, are given at the same time with space, so, also, number, form, and size form a comprehensive, reciprocally limiting, actually pure, inseparable three in unity.

But since number is the expression of manifoldness in itself, and in truth the expression of that which limits manifoldness, and therefore of the directions of power; and since it by no means originated from lifeless, outward additions, but according to active inner laws founded in the nature of the power, while size and form can be explained only through manifoldness, — the knowledge of number is the most essential and first step toward the knowledge of the triune whole.

The knowledge of number is therefore the basis of the knowledge of form and size, of the general knowledge of space.

But space itself is by no means lifeless, quiescent, stationary, but exists only through the constant action of the power which is self-limited by its own existence.

And as space itself owes its existence to and is conditioned by the cause and fundamental law of all that exists, so the general law of space lies at the foundation of each single appearance in space, and of each thing which is viewed under a space-filling form, of each thing that makes itself known in space by means of space, consequently even of the laws of thought and the knowledge of those laws.

Mathematics must be estimated and treated far more physically and dynamically as a product of Nature and of forces; then it will be far more instructive, and will conduce more, not only to the knowledge of Nature, especially of the chemical (material), but also to the knowledge of the effect and nature of the spiritual, the laws of thought and sensation, than one now imagines: especially all the curved-lined spherical, etc., departments of mathematics lead to such knowledge.

The education of man without mathematics and without fundamental knowledge of number at least (to which, then, the knowledge of form and size annexes itself as a necessary condition, scantily indeed, by occasional appropriations) is therefore an unstable, imperfect patchwork, and sets impassable bounds to the cultivation and development to which man and humanity are destined and called, — bounds beyond which man (since he cannot throw off his striving nature and striving spirit) strives either to overleap, or, weary of the fruitless, spiritual impulse and effort, seeks to paralyze his powers; for the mind of man and mathematics are as inseparable as the soul of man and religion.

C. *Concerning Language and Instruction in Language.*

Section 77.

But now what is *language?* and in what relation does it, as the third of the poles of boy-life and of the life of man in general, stand to the two others?

Where true inner coherence, true inner active alternate effect, take place, a relation immediately expresses itself like that of unity, individuality, and manifoldness; so here between religion, Nature, and language.

In religion, the requirement of the mind, of that in man which refers to unity, comes out predominantly, and seeks the fulfilment of its anticipations. In the contemplation of Nature, and of mathematics, which is connected with the knowledge of Nature, the requirement of the understanding, of that in man which refers to individuality, comes out, and seeks for certainty. In language, the requirement of the reason of man of that in man which refers to manifoldness, and unites all manifoldness, comes out, and seeks for satisfaction.

Religion is life in the mind according to the requirement of the mind; it is the finding and feeling of the One in all. *Nature* is the recognition of the individualities of Nature, of their relations to each other and to the whole; it is seeking according to the demand of the understanding. And *language* is the representation of the unity of all manifoldness, of the inner active coherence of all things; it is the striving according to the demand of the reason. These three are therefore an inseparable unit; and the one-sided, detached cultivation of the one or the other devoid of connection, necessarily effects one-sidedness, and consequently, at last, the destruction, or at least the ruin, of the unity of the human being.

Religion strives to make known, and does make known, the *entity*. *Nature* strives to make known the nature of the *power*, the cause of its effect, and the effect itself. *Language* strives to manifest, and does manifest, *life* as such and as a whole.

Religion, Nature (mathematics is, as it were, Nature in man according to its design, its laws, and its limitations; it is Nature as, according to its necessary limitations, it lies and must lie in the spirit of man, without which Nature could not become known to man, but for that reason can be more completely known to man when actually present as an outward appearance) — religion, Nature (mathe-

matics), language, have all three in all their manifold references the same occupation and effort, — to make known and to reveal the innermost; to make the internal external, and the external internal; and so to show both innermost and outermost in their natural, original, necessary harmony and coherence.

What, therefore, is to be said of one of these three must necessarily be true of each of the two others, only in a more peculiar way. What, therefore, has hitherto been said here of religion and Nature, — with mathematics, — must, if it was and is otherwise perfectly true in itself, necessarily be also true of language, only with the peculiarity conditioned by the individual nature of language; and so it is.

But we must also in life — to the great sorrow of single and unseparated humanity, and with the greatest hindrance to the improvement and continuous cultivation possible to humanity — meet with the delusion that one can exist without the others, by itself, and can raise itself to the stage of completeness in its cultivation and development: *language* without Nature (mathematics) and religion; *religion* without language and Nature (mathematics); the *knowledge of Nature* (mathematics) without knowledge of language and religion.

But just as certainly as it was necessary that God, as he wished to make himself known and reveal himself completely and indubitably in the totality of his nature, must make himself known and reveal himself in a triune way; just as certainly, also, is religion, Nature (mathematics), and language, an inseparable *one*. The complete knowledge of, and the firm security in, the one, conditions and demands, necessarily, also the complete knowledge of the other: the recognition of the one, conditions and demands, necessarily, also the true recognition of the other. Since, now, man is destined to sure, clear knowledge and to the attainment of complete consciousness, the education of man necessarily demands also the estimation and recognition of religion, Nature (mathematics), and language, in their inner, active, reciprocal reference and limitation.

Without the recognition and acknowledgment of the inner union of these three, the school and we ourselves are lost in the manifoldness endlessly producing itself, — in the bottomless.

Such is the nature of language and its relation to man and to the education of man.

Now, how does language in itself and through itself make known its nature? how does it confirm this nature?

Section 78.

In general, language is the self-active statement of the peculiar interior become exterior, the representation of it by the exterior, as the breaking of a thing makes known its innermost.

As the breaking out of the bud into a flower makes known and reveals the innermost of the flower, so he who speaks makes his inner nature known by his own action; so language makes its inner known by the outer, and is therefore the representation of the inner by the outer.

But the innermost of man is constantly moving and living, it is *life;* therefore the properties and phenomena of life must make themselves known by the language of human tones and words.

Therefore the complete human speech, as a representation of the nature and interior of man, and constantly connected with it, must be made known, and so, necessarily, be audible, even in detail, by the slightest movement.

In order, as it were, to make man known in his wholeness, in order to make itself known all-sidedly and constantly, language must be extremely movable.

But man in his wholeness, and as a phenomenon of Nature, also wholly bears within himself the character of Nature; consequently in language the nature of man, the essence of man, as well as the whole essence of Nature, makes itself known.

Language is consequently the imitation of the whole inner and outer world of man.

But the inner of man, like the inner of Nature, is law, is necessity, is spirit, is eternal, is the divine, appearing outwardly and through the outward.

Therefore language, also, must make known law, the conformity of laws, in and by and through itself. Language must be the expression of necessary conformity to laws. The collective laws of the inner and outer world in the whole and in the individual must therefore present themselves in language, must lie in it as such. And so it is.

Section 79.

Language, like mathematics, is double-sided, belonging at the same time to the inner and outer world.

Language, as an independent product of man, proceeds as directly

from the spirit of man as Nature does from the spirit of God: it is the representation and expression of the human spirit, as Nature is the representation and expression of the spirit of God.

The accordance of language as an independent product, and language as an imitation of Nature, which suggests the question whether language be a pure product of the spirit, or an imitation of Nature, — this, as well as a different question and opinion, finds its basis in the fact that one and the same divine spirit dwells in all, that the same spiritual divine laws work in all.

This accordance further has its cause in the fact that the spirit of Nature and of man is *one;* that Nature and man have *one* cause and fount of their existence, — God.

And as language is the representation of man and of Nature, and consequently of the spirit of God, so goes forth from language, knowledge of Nature and of man, and consequently revelation of God.

Indeed, language is, from the side of the contemplation of Nature, itself the representation of power increased to life: on the side of man, it is itself the representation of the spirit of man becoming conscious.

Language is therefore necessarily conditioned in the nature of man as a spirit becoming conscious of itself, and destined to consciousness, and forms with it an inseparable one.

On account of the double nature conditioned in the essence of language, on account of the intermediating and connecting of this double nature, mathematical as well as physical properties, properties of life and of movement must be proper to it.

Therefore language also necessarily expresses not only the general fundamental references and properties of Nature, but also the effects and expressions of the spiritual in its ultimate elements of words, voice-sounds (vowels), open and closed sounds (consonants), and the letters denoting them.

However incomplete and lacking may be that which till now has, from and in the outward experience, been demanded, and thus is also still to be adduced concerning this view of language, yet the inner life, which bears language within it in its finest fibres, and which makes of it a complete life-whole, goes forth from it clearly: and, notwithstanding this incompleteness of the attempts, and deficiency of facts individually, the inner conviction cannot be repressed, but rather comes forward with confirmation at each step within the language whole — that in every language very clear, fixed, and precise

mathematical, physical, physico-psychical laws (laws of Nature and of the spirit), conditioned by inner necessity, express themselves in the elements of words, voice-sounds, open and closed sounds, and their signs, the letters with their different combinations. The conviction also comes forth that the representation of a definite object or idea by word, viewed and recognized from one particular side, necessarily requires these precise elements of words (letters), that it requires exclusively these and no others, so that each single word is thus a necessary, precise product of certain individual word-elements, as each individual, material product, each chemical product, is conditioned only by precise individual material, or, what is the same, by definite, individual powers.

In other words, the elements of words in their different combinations symbolically represent the objects of Nature, the forms of the spirit and their relations, according to their innermost nature and the personal or provincial, etc., comprehension.

With but slightly-won attention to the conformity of laws everywhere expressing itself in the natural as well as spiritual, the physical as well as the psychical world, this conformity of laws in the formation of particular words in our language can absolutely not be repelled: indeed, the inner conformity of laws, and, as it were, the activeness in the formation of words, is indubitable for him who is vividly penetrated by their inner life and their inner unity, though there is still little to be said about this conformity in particular.

This might, indeed, deter one from speaking for this conformity of laws, for the truth and acknowledgment of this conformity of the laws of language; but one sees himself here in the position of the lover of music who is not musically trained. Music speaks to him in the great musical representation in all freedom, necessity, and legitimacy, though he himself can bring out and show but few of these musical laws, and can still less follow even the slightest of them: indeed, one who is wholly uncultivated hears and enjoys the music without even a dim presentiment of its law, and it is at best merely the measure which he is able to retain.

Something similar may be said of the impression of forms, colors, materials, and forces. We see ourselves surrounded by their manifoldness and by their different effects upon us and other human beings, almost without divining, still less perceiving, their unity and the accordance of their laws.

But because these laws are not divined, are not known, and are still less perceived, do they the less exist?

So is it with us with our mother-tongue and the finer laws of its formation of words. Because we hear it spoken from the first instant of our self-knowledge, it appears to us like a continual sound, or at most, in reference to its visible single words and word-stems, like a collection of variegated stones of which different kinds of trinkets may be made, or like beautiful plants of which beautiful bouquets are made. But the words in their origin, so called stems, appear as accidental material, without being subject to a higher principle of organization.

As entirety of tones proceeds from fundamental tones, as the totality of material proceeds from primary materials, and as forms proceed from the fundamental directions of the forces, so in language the words go forth as images of objects, as representations of ideas, so that they form fundamental ideas and totality of ideas.

The elements of the words (visibly the letters) are therefore by no means something dead, by the arbitrary arrangement of which, words result; but they indicate original and necessary, mathematical, physical, psychical, fundamental conceptions: hence they bear some significance in themselves, and form the word according to necessary, legitimate grouping; and thus each object, thing, property, relation, etc., appears as a totality of conceptions, but also as the product of certain single fundamental conceptions, which, by their inward, reciprocal penetrating, form the whole, — the word.

Let us listen, for example, to words beginning with *fr*. These single words as single totalities of conception have a fundamental conception pervading all; this is an immateriality or spirituality making itself known in outward, acting manifoldness, which language seeks to designate by *fr*.[1]

Let us listen, on the other hand, to words beginning with *fl*. All these words have, indeed, the expression of immateriality or spirituality, but by no means in the vigorous, lively, external activity which is expressed in the words beginning with *fr*: but, as the conceptions of those words all enter vigorously into outward life, the conceptions of these words all indicate more an inward life, an inward, constant activity, as those do more a totality of single activities. The former words had in common the letters *fr*; the latter, the letters *fl*; both have the spirituality or immateriality denoted by *f*; the distinction of

[1] The author speaks of German words; but it is also the case, to a certain extent, with English words. — *Translator.*

more outward, single life must therefore be denoted by *r;* and the expression of more inward, constant life, by *l*.

Words whose central vowel is *u*, and, on the other hand, words whose central vowel is *a*, the consonants of which are the same or similar, we shall find express in the first series an inward character, but in the second series an externality. Since, now, the effective difference is *u* and *a*, language must denote more the inner by *u*, and the outer by *a*. From this proceeds the fact that rhyme, the unity of that which is outwardly manifold, has a deep inner principle.

If we listen to words beginning with *k*, we find that all these words have in common an independent, resisting power; which common idea is expressed in language by the common element *k*.

Incomplete and inadequate as is and may be that which an occasional and often long-interrupted observation of language has yet until now recognized as a pervading phenomenon and law, yet it is placed here in order to point out, at least in general, the conformity of laws shown by language from this side of consideration also. Indeed, it seems as if an incomplete demonstration of the results of this side of the consideration of language might injure the true estimation of it: yet this view of language is too deeply grounded in the essence of language, and too important to the development of man for the attainment of self-consciousness and for the knowledge of the outer world itself to be passed by; wherefore it only need be pointed out and shown in some coherence to develop, continue to form, and confirm itself. This view will be more extensively carried out later for the purpose of education and instruction, since by means of it language can be recognized in its innermost relation to Nature and to the spirit of man, and, in a certain reference, the similarity of its laws with those of both can also be recognized.

First of all, language, as a type of something formed in space, or spiritually formed, and as a fundamental property, must necessarily express the inner, the outer, and the connection; and in fact language generally expresses the inner by the vowels, the outer by the closed, and the connection by the open sounds. These three fundamental elements of language have a reciprocal relation like unity, individuality, and manifoldness.

But since the opposites of inner and outer, as well as all opposites in general, are only relative, so the inner separates again into an innermost, an essence, and into a form of appearance.

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From what has been indicated proceeds the high importance of the unity of language, as well as the fact that it is not to be obtained in an arbitrary, outward way. The true significance of the dialects, and the importance of their consideration, also proceeds from the same, since it is here by no means the intention to bring these laws of language into a system, but only that the boy's attention may be early called to these laws of language of which he will soon find more by his unclouded mind than have here been pointed out. What has been said must suffice to call attention to the mathematical, physical, and psychical properties of language, by which it is actually an image of the outer and inner world.

These properties of speech are indeed to be perceived and recognized in their life, first of all in our living mother-tongue; yet they belong by no means only to our German language, but are found also in the Greek and Latin (which are akin to the German), in the way peculiar to each of these languages; so that even from this view of language proceeds the insight into an inner relation of this language according to which German, Greek, and Latin belong to one another, are related to one another, like soul, life, and body.

We ourselves, and especially our children, will attain to a far more fundamental insight into language, if we, when teaching them language, connect the words more with the actual perception of the thing and the object. Language would then be for us, and consequently, as it were, also in itself, not only a whole composed of sounds, tones, and words, but an actual living whole of things, and therefore will again rise more toward the perception and recognition of things, and so to the perception and recognition of the essence of each thing, consequently of the word itself. Our language would then again become a true language of life, that is, born of life, and producing life; while it threatens otherwise, by merely outward consideration, to become more and more dead.

Section 80.

Among the several laws which offer themselves for consideration, besides the thoughts here given of the nature of language, the law of movement (rhythm) — which expresses itself in its individual parts of words as well as in its combinations of words, and which shows the similarity and conformity of its laws with the character of Nature, as well as that Nature is born of the spirit — here especially demands notice.

The law of movement of language, the general expression of life in language, is originally so one with language, and so inseparable from it (as life itself is inseparable from the objects represented by language), that all the first representations of language as representations of the inner and outer life must necessarily also be representations of the legitimate movement of language; they must be representations in movement-wholes, and this so much the more as the inner life of the object becomes more actively and outwardly perceptible to man in his childhood and youth, and therefore also to the whole human race in its childhood and youth. Therefore, now, the representation of language in movement-wholes, in connected speech, belongs at first to youth, as it first of all belonged to the youth of the human race, and as man in general sees and perceives the whole in its connectedness, especially in its connection with man, earlier than he does the single in its singleness. Therefore, from several points of view, the representation of language in connected speech, the representation of language, therefore speech itself, in series of movements, in movement-wholes, necessarily belongs to youth, and, when youth has lost it, one of the first, most original and natural means of ennobling youth, as well as the whole human race in general, has been taken away. Therefore if we would again raise our children to true, higher spiritual and inner life, we must hasten to re-awaken in them this inner life of language, of the contemplation of Nature, and of discovery. And the way to this is so easy! We have almost nothing at all to do but to let the peculiar life of the child live in youth, and protectingly and fosteringly to remove what might deaden and destroy it; but, instead of that, we deaden the germinating life in the child, and frighten the life striving to uncoil itself from Nature, back into the fixed form, by our rough, lifeless, heartless words, as, for instance when we say, "Come, dear child, do look at the violet; is it not pretty? Break it off, and put it in water, but take care of it; it would be a pity to lose it." How wholly different would be the impression and the results of this sight upon the same childish mind if we said, —

"The blooming violet
Come and see;
I, blooming violet
Delight in thee";

thus giving words to the child's feeling also. Who can believe that this is foreign to children, who hears simple and natural, quiet, observ-

ant, and thoughtfully-guided children as, very early, with the simplest expression of their sensations, and with the pointing out of their first perceptions, they so naturally speak in movement-wholes, knowing and conjecturing nothing of them, though so easily employing them? Of course there are not many such children; but there are some, and there might be many; for we do not know what we strike dead in our children, or at least what we allow to starve out unroused and unnourished.

And yet we finally require that our children who have thus grown up void of perception and feeling shall at a later time understand poets and Nature. Here, now, is the child of cultivated parents (who would believe it?) called upon to represent before cultivated people the artificial work of the art of teaching, called "declamation"; yet see the poor child, vain or trembling, conceited or shame-faced, and say who is the more to be pitied, — the child, its teacher, the poem and the poet, or those present.

Section 81.

The simply and naturally-developed child, as well as the boy and man thus developed, finds himself by means of religion, Nature, and language, in the midst of all life; so that he is not even in condition to retain the mass of facts by themselves, still less with regard to place and time, and so one and another thing threatens to escape him. A far richer life develops within him, — a life so rich that his inner nature is no longer able to grasp the fulness and richness of it, and it overflows, so that it now comes to him again from without, in its fulness and by its fulness, as a peculiar, independent, definite second life as it were; and he can thus become conscious and is conscious of it as a definite life. And so it must be; for now he is driven by the irresistible, urgent desire and the need (which is inevitably to be satisfied) to snatch from oblivion the blossoms and fruits of the rich but easily-vanishing inner life, and the fleeting, transitory outer life of the form, in respect to the place, the chronological order, and other things, and thus to retain them outwardly by means of signs for the benefit of his own life or that of others. Thus *writing*, *script*, develop in each individual again in the general way shown by the history of the world, and in accordance with the course of the general development of the human mind, as in general the individual human being develops according to laws more peculiar indeed, but more in

accordance with those according to which the whole human race has improved, and humanity has hitherto developed; and we see at the same time how, through a predominating, richer outer life, the *hieroglyphics* are necessarily conditioned; but a predominantly richer inner life, on the other hand, necessarily conditions the *script* which conveys ideas and *conceptions*, — the *letter-script*.

Now the hieroglyphics as well as the letter-script presupposes a plentiful, rich inner or outer life; from and by means of this only is script produced; and up to this time there develops the general need of it in the child, in every individual human being, only in this way; and so it must be.

Therefore, from this point of view also, the care of the parents and educators is required to make the inner life of their children and pupils as rich as possible, not so much in respect to the manifoldness as to the inner significance and activity of life; for without this, and if the script and the learning to write are not connected with a certain inner need, the mother-tongue becomes external, lifeless, foreign, which it now is in a great degree for so many. Yet, if we only also enter again in particulars into the great necessary path of humanity, the former great and fresh life of humanity comes back to us also in and through our children; the qualities and powers of the spirit, the capacity for penetration and conjecture, now weakened, will then again appear in their whole fulness and power.

And why should we not earnestly exert ourselves to again enter on this necessary way, since the boy exerts himself to lead us back to it?

For see, here the boy paints into his picture the apple-tree on which he discovered a nest with young birds, and there the kite which rose so high in the air. Here sits before me the not yet six-years-old boy, and draws and paints independently in his book for free drawing many of the strange creatures he saw yesterday in a collection of animals.

Who, surrounded by little boys, has not received the entreaty, "Give me some paper! I want to write a letter to papa, to brother," because the boy's inner life urges him to communicate it? It is not imitation, for no one was writing; only he knew in what way he could satisfy his actual yearning. The marks he made, though they all looked pretty much alike, indicated to him the different words which he actually expressed to the person to whom he wrote by these marks; and the need of script by which to convey his ideas — the

letter-script — is as evident here as in the former case was that of the hieroglyphics, or picture-script.

There are, indeed, boys of this age so thoughtful and meditative, so capable of quietly contemplating within themselves the most spiritual, that with them, in the same manner shown by the human race, the need, and, as it were, the discovery, of the letter-script were to develop; and how well it is known that larger boys form their own script! Yet it will always take place in a similar way, since a certain need of the boy will absolutely always be connected with all teaching, with all instruction; which need must, in a certain respect, have been inevitably developed previously in the boy before he can be instructed profitably and with results. In this is a principal cause of a great deal of the incompleteness of our schools, of the character of our instruction. We teach and instruct our children without awakened need for this instruction, even after we have killed that need which was in the child.

How, then, can instruction and the school advance?

Section 82.

As certainly as the irresistible ardent desire of an overflowing inwardness, and the effort to hold fast this fulness, is the foundation of writing; and as writing is the fruit of the thinking and thoughtful, self-observing man, — just as certainly the signs of writing, as signs for the individual elements of words, are also not arbitrary, and are certainly in connection with the denoting of conceptions, and (which may indeed be the same) with the way in which they are formed.

Little as may still be known of the first fundamental references and the first fundamental forms of the written characters, and blotted out as the laws from which they have proceeded according to silently ruling necessary conditions may have been, yet some remaining fundamental forms of the written character appear still to show indubitably the inner coherence with the significance of the element; thus the O, finished in itself, as a sign of the element for the conception of that which is completely finished in itself; thus the S, striving to run back into itself, as the sign of the element which denotes the conception of turning back.

Unsought there comes out in the written characters originally Phœnician, and later Roman, a certain relation between the form of

the character and the pointing-out of the conception of the element.

Yet, though that original precise relation between character and element were no longer actually demonstrable, every glimpse of it should be held fast for the purpose of instruction; because absolutely nothing is to be brought forward to man in a purely arbitrary connection, for which it is not at least possible to discover an inner necessary cause: hence the instruction in writing hitherto and at present given is so lifeless and deadening, so mechanical.

It is highly judicious to connect the first instruction in writing, the first actual writing, with the old Latin capitals, consisting of simple and simply compounded lines, and therefore easy to imitate and retain.

The fruits of repeated application of this course of instruction show its judiciousness, and its correspondence with boy-nature. This course of instruction will be further designated, particularly in respect to its inner principles.

Section 83.

Here is only given the further information that in this way the *reading*, as well as the learning to read, again assumes its original and natural relation to the scholar; for reading necessarily proceeds from the need to again make audible to one's self or others that which was before written, to recall it to one's own memory, and to bring one's self to clearer consciousness of it, and, as it were, again to arouse it.

By the acts of writing and reading, which must necessarily presuppose a living knowledge of language in a certain breadth, man raises himself above every other creature that he knows, and approaches the attainment of his destiny.

By the exercise of these acts, man first becomes a person: so the effort to learn to write and read makes the pupil a scholar, makes school for the first time actually possible. The possession of script conditions and affords to man the possibility of becoming conscious of future consciousness; for it conditions for the first time true self-knowledge, because it makes it possible for man to contemplate himself, his nature, placing this nature, as it were, before him; because it clearly and surely connects man as present with the past and future; it connects him on all sides with the nearest, and certainly with the farthest.

The script thus affords man the possibility of attaining to the highest, most complete, earthly perfection.

Writing is the first principal act of independent attainment of consciousness.

Since, now, writing and reading are so highly important for man, the boy must also be strong and intelligent enough for them. The possibility of attaining to consciousness must be already awakened in him; the need of writing and reading, the urgent desire, even the necessity, of being able to do so, must clearly and definitely express themselves ere he learn to write and read.

The boy who is to learn to write and read in a truly advantageous way must necessarily be already something, before he seeks to become conscious of something which he as yet is not; else all his knowledge will be hollow, lifeless, void, extraneous, mechanical. For where the foundation is lifeless and mechanical, how is the activity of life, and true life the highest prize of all effort, to later develop from it? how is man then truly to attain his destiny, his life?

D. *Concerning Art and the Subjects of Art.*

Section 84.

If what has been hitherto said about the object and the middle point, the last point of reference of all human effort, about that which, even in boyhood, moves the life of man, and makes the poles of boy-life, is collected under one point of view, there comes out from it clearly and indubitably the fact that all human effort is threefold, — either an effort for rest and *life within*, or an effort for the knowledge and *reception of the essence of the outer*, or, lastly, an effort for the *direct representation of the inner*. The first is predominantly the effort of religion; the second, the effort of contemplation of Nature; and the third, predominantly the effort for self-representation, self-development, and self-contemplation. If what has been hitherto said in the latter reference is again brought together, it shows that *mathematics* refers more to the inward representation of the external, to the representation of the just proportion of the laws resting in the inner nature of man, and so, as it were, to the representation of Nature by man himself; wherefore, also, mathematics is a connection between Nature and man. *Mathematics*, therefore, refers more to the intelligence, and lays claim to the intellect. *Language* refers more to the representa-

tion of the perceived and examined inner, and refers predominantly to the reason, and lays claim to it. But there is now necessarily one thing still lacking for the complete representation of the nature of man: this is the representation of the inner life by itself, of direct sensation, of the mind. And this third, the representation of the inner nature of man by itself, is *art*.

Section 85.

All human conceptions, except one, are relative conceptions, can be strictly applied only relatively; or, in other words, all conceptions bear a reciprocal relation to one another, and are necessarily separated only in their outermost end-points.

Therefore there is also in art again one side where it touches mathematics, — the intellect; a second where it touches the world of language, — the reason; and another where, although a pure representation of the inner, it yet appears as one with the representation of Nature; and, finally, there is yet another side, where it coincides with religion.

Yet here, where it is only a question of the education of man in general, and of educating him at least to value art, all these references cannot be taken up for consideration.

Here at this stage art is only viewed in its last unity as a pure representation of the inner. There now immediately comes out the fact that the representation by art of what lives within, of what actually makes up the life of the inner, must appear different on account of the material with which it is connected as a representation of the inner.

But this material as an earthly appearance can be only either mere movement by itself, though audible, but so that the result vanishes in its origination, — that is, tones; or the material can be only visible, the products consisting of the appearance of lines and surfaces as well as of colors; or the material can be predominantly perceptible in space, incorporate — mass. Here also, as in all actual things (since conceptions are only relatively strict, as has been repeatedly said), are found innumerable transitions and connections.

Art as a representation by mere tone is music, and predominantly song. Art as a visible representation by mere colors is painting. Art as a representation in space by the formation of the mass is moulding.

Drawing, which, however, with equal reason can be considered as the mere representation by lines, may be considered as the uniting middle point of the two latter; in which case the drawing then appears to belong predominantly to representation by lines; painting, predominantly to representation by surfaces; and moulding, predominantly to representation by material, in space.

On account of the just-mentioned connecting property of drawing, the effort to draw is so early a phenomenon in the development of man, as we have already seen at the stage of childhood.

But the effort to represent the inner by moulding as well as by painting expresses itself early in man, even in childhood, but very unequivocally in the beginning of boyhood.

From this proceeds clearly and unequivocally the perception that a sense of art is a general property in man, and must therefore be early fostered in man, at least from boyhood.

Man will, by means of this, be at least fitted to value works of art (even if the powers of his spirit and life, his activity, be not predominantly directed toward the side of art, and if he do not therefore himself become an artist), and he will, by a true school-training, be surely placed in position, uncalled himself, and without the true vocation for art, to set himself up as an artisan.

Song, drawing, painting, and moulding must therefore necessarily be early considered as a part of the general comprehensive education and training of man. They must be early treated as actual objects of the earnest school, and not be exposed to an accidental, worthless and fruitless, wanton arbitrariness; neither with the view that each scholar become an artist in some kind of art, and far less with the view that each scholar be an artist in all branches of art, both of which nullify themselves (though one might say the former of each human being in a certain respect), but with the definite view that each man be raised to the point of developing his nature faithfully, completely, and on all sides; that he raise himself to the point of recognizing the all-sided and all-powerful nature of man; but especially, as has been already stated, that each man understand how to perceive and to value the results of genuine art.

Representation in connected speech, like drawing in another respect, is again a connecting link proceeding from language; but as a representation of the inner world, as the poetical representation of the spiritual, ethereal inner world, as a quiescent representation of pure life, constantly moving and moved, it belongs to art.

In all, in life and in religion, consequently also in art, the ultimate and highest aim of representation is the clear representation of the pure man. The Christian art is according to tendency the highest (or at least it should be, else it ceases to be art and Christian art); for it strives to represent in all, the eternally abiding, the divine, especially in and by man. Man is the highest object of the art of man.

Such is now the totality of that which is the object, purpose, and purport of the life of man in general, and which expresses itself, and makes itself known as such, even in boyhood, at the scholar-stage. As now what has been hitherto said strove to show the object and purport of the whole tendency of the boy, the object and purport of the school, and of instruction in its ultimate unity and fundamental reference in accordance with its nature, so the former sought to show the boy in his free and independent entire life, in the unity of his inner and outer life, at the scholar-stage. It now remains to demonstrate in what sequence and connection the strivings of the boy develop in and from his life at this school-stage; how and through what instruction, in what order and form, the school is to work to reach these strivings, and what it has to do that through it man's striving in general, but especially this striving at the boy-stage and scholar-stage, may be satisfied.

4. CONCERNING THE CONNECTION BETWEEN SCHOOL AND FAMILY, AND THE SUBJECTS OF INSTRUCTION CONDITIONED BY THIS CONNECTION.

A. *General Contemplation.*

Section 86.

The child grows up in the family; the child becomes a boy and scholar in the family; the school must therefore connect itself with the family.

Union of the school and life, union of the domestic or family life and the life of instruction, is the first and most inseparable requirement of the complete development and cultivation of man at this time, which is to lead us to perfection. Union of the family and school life is the inalienable requirement of the education of man at this time, when man is at last to rise, and wishes to rise, from the burden, the emptiness, and the oppression of the outwardly communicated knowledge of conceptions and ideas, and therefore merely life-

less, memorized knowledge, to the life, air, freshness of the knowledge of the inner aspect and essence of things, to the contemplation and knowledge of things; which knowledge continues to develop from itself like a healthy, fresh tree, like a family and race full of life, glad in life, and conscious of life, when we at last cease from playing with signs in word, thought, and action, and from passing through life masked.

Would that we might at last, for the welfare of our children and the blessing of future generations, perceive that we possess a too great and too oppressive quantity of imputed, affixed, heterogeneous, and therefore foreign knowledge and cultivation, and yet foolishly strive daily to increase them; and that, on the other hand, we possess extremely few knowledges which have developed in us and from us, which have germinated in our own inner nature, which have grown forth in it, with it, and by means of it!

Would that we might at last cease to boast of extraneous thought, of extraneous knowledge, even of extraneous sensations and feelings! Would that we might actually cease to establish as the greatest glory of our education, of our teaching, of our schools, and of our instruction, the adorning of the spirit and mind of our children and scholars with extraneous erudition, knowledge, and skill! Would that we might cease to think that our aim and the best good of our children and scholars is reached and attained so much the more in proportion as they make a parade of this foreign and extraneous erudition, knowledge, and skill, which indeed resemble whited sepulchres!

This is, of course, an old disease; for, if we question and investigate in what way the German nation has attained the fundamentals of its high present knowledge, we see unequivocally that these fundamentals, elements, or principles, always came from without, out of the far and remote, were directly or indirectly obtruded upon it from without; for which reason we have not even a general equivalent word for this origin in our mother-tongue.

The strong German mind, the strong German spirit, indeed worked up that which was foreign, and appropriated it; but its results and character as a foreign one remained abiding.

For a thousand years we have borne these chains; but shall we therefore never begin to allow a tree of life to germinate in our own minds, a tree of knowledge in our own spirits, and bring it by careful tendance to a beautiful unfolding, that it may freshly and healthily blossom and bear ripe fruits which sink down in this world to spring up in the other?

Shall we then never cease to stamp our children, boys and scholars, like coins, and to see them parade with foreign labels and foreign effigies, instead of seeing them going about amongst us as an image of the law of life implanted within them by God, the Father, with the expression of the divine, and as the image of God?

Do we fear that our children are and will be ashamed of us?

What race, what people, and what time, is great enough to sacrifice itself for the sake of its children, and for the representation of pure humanity?

Indeed what father, what family, will feel the soul filled, and the power manifoldly ramified, by this thought?

For from the silent, hidden sanctuary of the family only can the welfare of the human race, first of all, return to us. With the founding of each new family, the heavenly Father, eternally working for the welfare of the human race, speaks to man by the heaven which He has opened in the heart of the founder of the family, and which issues repeatedly to the human race, and to each individual man, the call to represent humanity in pure development, to represent man in genuine aspect.

It is sufficiently manifest that our German mind and spirit can no longer endure the hitherto lifeless and extraneous knowledge and insight obtained by learning; that a merely external, polished cultivation can no longer suffice if we wish to be independent children, worthy of God. Therefore we need and seek knowledges germinated in our minds and spirits, freshly and healthily developed and strengthened, and increased by the sun of life, and in the conditions of life.

Will we now cover anew with rubbish the spring of life which God has made to well forth in the mind and spirit of man, of each man, in our own mind and spirit? Will we rob ourselves, and our pupils and scholars, of the inexpressible joy of having the fount of eternal life in their minds and spirits?

Will you parents, and you who take the place of parents, educators and teachers, continue to constrain your children to choke in with rubbish the fount of life within them, and hedge it in with briers?

You answer, "Only thus prepared do they make their way in the world. Children soon grow up; who then will support them? What shall they eat? What shall they drink? With what shall they be clothed?"

You are not to receive the answer, "Seek ye first," etc.; for you could not take in and understand *that* in your estrangement from God and from yourself; but it will be repeatedly said to you, "Does success in life depend on a stupid, stupefying life, void of knowledge, work, and action?"

The human race is to enjoy knowledges and conceptions; it is to possess a power of work and action which you, which we, do not now anticipate; for who has measured the limits of humanity born of God? But these knowledges, etc., are to grow out in the freshness and vigor of youth, as developments from each individual, as newly-created self-productions.

The boy will not carry on his future business, his calling, lazily, negligently, and gloomily, but joyously and serenely, confiding in God, himself, and Nature, and enjoying a manifold blessing and success in his business. Peace, temperance, and all the high virtues of a citizen and a man, will dwell in his inner nature, as well as in his house, and he will feel himself satisfied in and by his sphere, in the efficiency of his sphere, — the high prize toward which we all strain.

He will neither say, "My son shall carry on any other business rather than that which I have, for it is the most displeasing of all"; nor will he insist that his son shall engage in and carry on the business which he himself carries on with profit and advantage, because it suits his own individuality. He will perceive that each man may conduct the smallest business grandly; that each business may be so ennobled that it is not unworthy for the man to engage in; he will recognize and perceive that the smallest power rightly applied to a work, with pleasure in and liking for it, may procure for man, bread, clothing, shelter, even esteem; and he will therefore be without care for the future of the children, to unfold whose inner nature was his highest care.

Section 87.

As the individual directions of this united school and family life, of this active life of instruction and education, there necessarily proceed from the inner and outer requirements of the boy as a beginning scholar, the following: —

The vivification, nourishing, strengthening, and cultivation of the religious sense, — keeping the mind of man in union with God, and always actively uniting it with God, — the sense which divines and

holds fast the living necessary unity of all things with all their difference of appearance, and which by its activity and powerfulness makes the boy live and act in accordance with this unity.

In conformity to this, and with this object.

Appropriations of religious expressions, particularly concerning Nature, man, and the relation of both to God, especially for prayer, as a mirror in which the boy sees his original feelings, sensations, anticipations and strivings which unite him with God, and thus brings them to his own knowledge, and holds them fast:

Respect for, knowledge and cultivation of the body, as the bearer of the spirit, and the means of representing the nature of the spirit in exercises arranged to lead by degrees to such a cultivation of the body:

Contemplation and consideration of Nature and the outside world connecting with and proceeding from the near, requiring knowledge of nearest surroundings before an advance is made to the remote and far:

Appropriations of little poetical representations comprising Nature and life; especially appropriation of little rhymes which give significance to the objects of surrounding Nature, life, the phenomena and occurrences of the scholar's own domestic life, which show them in their pure and deep significance as in a clear mirror; and this especially for singing and by song:

Exercises in language and speech, proceeding from, and connected with, the contemplation of Nature and the outer world, and passing to a contemplation of an inner world, but always having distinctly and strictly in view language and speech only as audible means of representation:

Exercises in outward corporeal representations in space, according to rule and law, advancing from the simple to the compound. Here belong representations generally by more or less formed material — building and handiwork in general, for formation; paper, cardboard, woodwork, etc., as well as, lastly and especially, moulding from unformed or formable soft material:

Exercises for the representation by lines on a surface (in and by means of constant, outwardly expressed visible reference to the vertical and horizontal directions suggested by the middle and breast line of man); which are the means of perception and comprehension of all outward forms, and which appear several times repeated by the side of and across one another, forming network; therefore drawing in net according to outward necessary law:

Comprehension of the colors in their difference and resemblance, and representation of them in already-formed surface-spaces with predominating notice of forms already made;

Painting pictures in outline:

Or with predominating notice of colors and their relations;

Painting in net, in squares:

Play; that is, freely active representations and exercises of every kind:

Relation of stories and sayings, fables and fairy-stories connected with the occurrences of the day, time, and life, etc.

All this now is shared between the domestic and school life, between the family life and the general human life, between home and school occupations.

For boys of this age should already have certain small domestic occupations; indeed they could be actually instructed while engaged in them, especially by mechanics and farmers, as is done, as has been already done, and accomplished by many a father, simple indeed, but guided by an active and strong sense of Nature. Boys of somewhat advanced age should often be placed in position, by parents and educators, to accomplish something with their own hands and their own judgment, and parents and educators need only be careful that self-examinations and firmness of judgment come to the boys by these means. It is very important, especially for boys of an advanced age, to devote daily at least one or two hours, with complete and firm determination, to an outward occupation, to an occupation for outward results. Effects of the greatest importance for life would proceed from this, as it is certainly one of the greatest injuries of our now existing school-arrangements, especially the so-called Latin and normal schools, that the boy who enters these schools is wholly removed from all domestic employment, all employment for the purpose of bringing out an outward result. Do not answer, "A boy must at this time, if he is to bring his knowledge to a definite stage and completeness, direct all his power to the point of learning words, of acquiring knowledge by means of words, of intellectual cultivation." Not at all; genuine experience teaches the contrary. Intellectual employment and intervening outward more corporeal employment, activity in outward productive work and result, strengthen not only the body, but quite predominantly also the spirit, the different directions of the activity of the spirit; so that the spirit after such a refreshing work-bath (I cannot better designate it) goes with new vigor and new life to its intellectual employment.

If we now consider the subjects of united family and school life before cited, they group themselves according to the total requirements of the boy into subjects, —

of the more tranquil, quiet inner life,
of the more receptive life working within, and
of the more outwardly-forming life working outwardly;

hence they also generally satisfy the need of man.

Further: we see, by means of these subjects of instruction, all the senses, all the inner and outer qualities and powers of man, developed, exercised, and cultivated, and thus the requirements of human relations and of the relations of life fulfilled.

Finally, we see how the requirements of all these subjects, numerous and comprehensive as they appear, are all easily fulfilled by a simply arranged family life and life of instruction, by a united home and school life, and consequently necessarily satisfy the requirements of man at this stage.

Let us now view this in particulars.

B. *Particular Consideration of the Individual Subjects of Instruction.*

a.

VIVIFICATION AND CULTIVATION OF THE RELIGIOUS SENSE.

Section 88.

If child and parents have grown up in union of life and mind, this union will certainly not only remain undiminished, through the whole time of boyhood, and yet longer, if new obstructing and disturbing causes do not come in between to separate them, but will become so much the more confirmed and vivified as the boy advances in age.

The question here is not of that hollow indefinite union of feeling which, as it were, makes one of two bodies, such as is found between parents and child; but of that union of active minds and clear spirits which shows life in its effects and phenomena as a whole.

This union of active minds and clear spirits, not the union which is perhaps at most only outward community of life, is the firm basis and foundation of genuine religiousness.

The inner life, the clear representation of the inner spiritual life of man, is common to this union of spirit between parents and child, between parents and boy.

What it was not possible, and is not now possible, for the father and mother to represent in themselves and by themselves, on account of hindering influences, they now seek to obtain in and by their son both in childhood and boyhood; viz., representation of pure humanity in and by itself.

The clear and sure experiences of the development, improvement, and continuous cultivation of his inner life, which the father bought dearly, often painfully and only with diminishing power, but for that reason can no longer apply in his own life, he communicates to his son, and the son uses these experiences (although foreign to his own outward experience, but vivifying and confirming themselves in his inner nature), and applies them with the yet undisturbed and unweakened vigor and freshness of youth.

But all communications of parents to their son are lifeless and without effect where their life was not from an early period a constant, unbroken whole; for two apparently different worlds, and the experiences of these two worlds, are opposed to one another with different requirements and different powers, for which the resembling connection is wanting.

But, on the other hand, he only who has tried to establish this fact can divine and measure what fruits proceed from that union of spirit between parents and child, between father and son, which has for its common ground and aim the cultivation and representation of the highest and purest of the pure human entity.

From the consideration of the individual and joint life in respect to its inner ground and aim, but especially in respect *to its inner* and necessary *living coherence*, necessarily conditioning such a union of spirit, there now proceed, for the mind and inner perception of man even in boyhood, the most unequivocal proofs and convictions that God, to speak humanly (as we can in general speak in no other way of the Divine, or at least in no other comprehensible effective way), still uninterruptedly guides humanity in and toward its development, improvement, and representation by his fatherly guardianship and care, and constantly also accompanies each individual as an essential part of the whole in all the occurrences of his life with fatherly, loving protection and help.

For how could man otherwise or more comprehensibly mark the knowledge that the occurrences of life, truly recognized in their cause, nature, and significance, and made use of in conformity to this recognition, are always for the advantage of the individual, and of the whole?

These truths being confirmed in one's own life and the lives of others, in individual and mutual life, in the life of man and of Nature, by experience and revelation, it must necessarily more and more clear and purify the boy's sense, heighten and increase his power, and confirm his courage and endurance, to find the union and unity of the revelations of Holy Writ, of mind, and of Nature, and thus to recognize himself as a part of a whole and totality which develops more and more widely before the eyes and the inner sense of the boy from the small parental and domestic sphere, and whose common effort,[1] amidst the most speaking proofs of divine guidance, help, and blessing, is to represent the spiritual in and by the corporeal, the divine in and by and through the human.

The life of such a family, of such a boy, will necessarily be a life expressing in *action* and in production the prayer of Jesus; a life of trust in God, of love for God and man, of voluntary childlike obedience to God; a life in this sense always active and efficient, a Christlike life, will again express itself in such a boy; and so it will be possible for him to understand the teachings and requirements of Jesus in his own life, and by his own life, and so to apply them to his own life, and to live in accordance with them.

A further religious instruction resting on such a spiritual and childlike union of spirit has a firm foundation; such an instruction only is fruitful and rich in blessing; and it is fruitful and rich in blessing only in the measure in which a vivid sense and clear view of inner spiritual life is early awakened in the boy by favorable relations of life.

There is no danger that any subject of inner spiritual life will be too high and too incomprehensible in its nature for the inner spiritual sense of the boy; only let the facts be simply given and expressed to him, and his inner power will easily find the inner sense of them in the ways of perception and representation accessible to him. We now rely too little on the religious, and in general too little on the spiritual power of the sense and mind of the boy in early boyhood. Consequently the life and mind of the boy at a later period shows itself so empty, so without experience in reference to spiritual and purely human, moral, and religious perceptions, and therefore so ossified and lifeless, that very few and only weak fibres are found in him for connection with and instruction concerning a genuine religious life; and

[1] That is, the common effort of the whole above referred to. — *Translator.*

yet such a life is now so much required in the following age by boy and youth.

Children are early awakened to and taught concerning a mass of externalities which they cannot understand, just because this mass is strange and external to them, and they remain unroused in reference to many inner things, untaught concerning so many, in fact almost all, inner things which yet they might understand within themselves. So children are early introduced into the strange outer life, and, on the other hand, are estranged from the inner life; for which reason their inner life is so hollow and withered.

If man is to understand many truths, especially religious truths, he must be made to experience much, that is, to become conscious of the events, perhaps small in themselves, of his religious life, of the course of his spiritual development and of its limitations.

Man must rise from the anticipation and knowledge of God as a father in his *own* life, to the anticipation and knowledge of God as the Father of all men and of all beings; else the future religious instruction is void and fruitless.

Many, very many religious errors and misconstructions, many not genuine and half-truths drop off by such an early observation of, or at least by unobstructed and undisturbed surrender to, the development of the inner spiritual life in harmony with the outer life and in reference to it. By such an observation and surrender would be also avoided the misunderstood prominence given to certain expressions of definite religious teaching, which in this one-sided presentation have exactly the contrary effect in and on the life of man which they were intended to have, as, for instance, the so common saying, "If you are good, you will be happy," which is brought forward in religious instruction in general with detriment to the life, the happiness, the satisfaction, and the constantly vigorously striving mind of man.

To the simple boy who is still deficient in outward experience, who still feels and finds his life an undivided whole, inner and outer good, inner and outer happiness, inner and outer life, are still undivided, still differing but little from one another; and so, without a doubt, without a conjecture that it could be otherwise, the inner, clear, pure life of the mind is also necessarily placed as an outer one; so the inner fruits of being good are also outwardly demanded and expected.

But inner and outer, infinite and finite, are two worlds whose phenomena, compared according to their form, are outwardly entirely different, and must be different. Therefore that common saying, if it

does not very early disturb and weaken the inner peace, the inner strength, of the boy, yet must necessarily fill him with false expectations from life, must lead him to wholly false judgment, understanding, and use of the events of his life, to very important mistakes in life.

Definite religious teaching should rather present, demonstrate to the boy in his own life and the life of all, and make perceptible in all development in Nature and humanity, the saying that he who truly desires the pure representation of humanity with earnestness, effort, and devotion, must necessarily live in outward oppression, in outward pain and need, in outward care and sorrow, in outward want and trouble and poverty; for the demand of that effort is, that the inner spiritual true life should reveal, manifest, and represent itself. If this now takes place, the result must necessarily and unavoidably be as above stated.

That they may have a vivid recognition and conception of this, let the boys view the requirements and limitations, the phenomena, of the development of a tree, in comparison with the necessary requirements and limitations, the phenomena, of the spiritual development of the man.

Each stage of development attained, though so beautiful and symmetrical in its place, must vanish and pass away, must be absolutely destroyed, if a higher stage of development and improvement is to appear: the protecting warming scales must fall off, if the young twig, the fragrant blossom, is to unfold, although the tender twig, the delicate blossom, may be and often is exposed to the still inclement spring weather. The fragrant blossom must fall off to give place to a fruit at first insignificant, sour, and bitter. The delicious red-cheeked fruit so refreshing to man must fall and decay, so that the young plant and tree may germinate in youthful freshness.

Thus the psalms of David and the songs of those who battle for the attainment of the greatness of man, of the representation of pure humanity, resemble the fruits of their tree of life, which could absolutely appear only by the passing away of many of the earlier developments of life, dear and precious to them, to give place to later, higher, and nobler ones.

And do not the expressions of those psalms, songs, etc., resemble kernels which, sown again in the fruitful soil of the mind of man, bear shady trees full of fragrant blossoms and strength-giving, eternal, immortal fruits?

Therefore the condition of the highest development is to renounce, to dispense with, to let drop, the outer in order to gain the inner.

With this, renunciation, etc. wholly harmonizes the expression coming from the other side of the contemplation, "The dearer the child, the sharper the rod," or "Whom the Lord loveth he chasteneth"; and this truth will reach the mind of any boy not wholly estranged. The man thus led, conscious of his honest effort, will not now surlily complain, like a refractory child, about the adverse occurrences in his life; he will not say, "Why am I so unfortunate? I have done nothing wicked; at least I am conscious of nothing wicked. That other man, who is known to be wicked and evil, or is at least known to act according to merely outward view and judgment, on transitory and untenable grounds, is yet so fortunate." He will rather say to himself, "Just because you earnestly and firmly strive only for the highest and best, only for the abiding good, all merely relative apparent good must fall, that higher and more complete developments, and finally more abiding fruits, may come forth."

Not less injurious, and extremely hindering to the attainment of the aim given to man, is the frequently prevailing prominence given in religious teaching and religious instruction to the reward of good deeds and actions in the world to come, when they seem to be unrewarded here. This future reward has no effect on still rude minds with whom the sensuous enjoyments stand highest; boys and men with only natural good sense do not need it; for if our deeds are good, if our conduct is pure, and if our actions are right, a reward in the other world will not be needed, even though in this all is lacking which the sensuous man considers valuable.

It shows but a slight knowledge of the nature, and but a slight esteem for the worth, of man, when prominence must be given to the inducement of reward in the other world to raise man to a mode of action worthy of his nature, his calling, and his destiny. Man can (if it be only early made possible for him to be a genuine man) and is, therefore, to be led to feel his worth and his nature at each instant, and the feeling, the consciousness, of having lived and acted in accordance with and faithful to his nature, must be his highest reward, without needing, still less requiring, another outward reward. Or does the good child, in the instant when he has within himself the consciousness of having acted as a child worthy of his father, in the spirit and according to the will of his father, need and demand any thing more than the joy of this consciousness?

Does a simple, natural child, when acting rightly, think of any other reward which he might receive for his action than this consciousness, though that reward be only praise?

Shall not man act as purely and excellently toward God as the earthly son toward his earthly father?

And does not Jesus himself say, "My meat is to do the will of Him who sent me," that is, "The consciousness of doing the will of my Father maintains, heightens, and rejoices my life"? and does he not consider the poor already blessed on account of the heightened efficiency of the powers of the soul, and a conduct in accordance with it?

How we degrade and lower the human nature which we should raise, how we weaken those whom we should strengthen, when we hold up to them an inducement to act virtuously, even though we place this inducement in another world! If we employ an outward incentive, though it be the most spiritual, to call forth better life, and leave undeveloped the inner, spontaneous, and independent power of representing pure humanity which rests in each man, we degrade our human nature.

But how wholly different every thing is, if man, especially in boyhood, is made to observe the reflex action of his conduct, not on his outward more or less agreeable position, but on his inner, spontaneous or fettered, clear or clouded, satisfied or dissatisfied condition of spirit and mind! The experiences which proceed from this observation will necessarily more and more awaken the inner sense of man; and then true sense, the greatest treasure of boy and man, comes into his life.

The future religious instruction will enlighten and illuminate these experiences, will bring them to consciousness, will unite and unify them, will draw from them the truths self-proceeding and thus resting in and confirming themselves, will show the application of these truths and the living in accordance with them in different stages of gradation everywhere where power, life, and spirit work, and will group them with the truths recognized and expressed by the enlightened man, by the man moved by the spirit of God. Thus genuine religiousness will be the eternal, hereditary portion of this man (and at last, by degrees, of the whole human race), and all the elevation already shown by humanity, and expressed in and by humanity, will also repeat itself in him. And the religious training of the individual, blessing the individual and the world, comes thus more into harmony with the course of the religious element in humanity, by which means every fallacy and doubt, every arbitrariness, disappears of itself, and there remains to us only the blessed and blessing consciousness that in God we live, and move, and have our being.

Appropriation of Religious Expressions.

SECTION 89.

It is certain that religious feelings, sensations, and thoughts well up and germinate in the human mind and spirit, doubtless because man is man; and so also in the boy who has grown up in union of spirits with his parents, and has not become estranged. But now these sensations and feelings in their beginning, make themselves known to man, and in the mind of man and boy only as an effect, a sensation, a fulness without word and without form, generally without the expression of that which they are, — only as elevating life, and as filling the mind. It is at this stage extremely beneficial, strengthening, and elevating for man, for the mind of the boy, that these sensations and feelings should be put into words, so that they may not moulder away, and, formless and speechless, be absorbed into themselves, pressed down, and destroyed.

We need not fear that with strange words, a strange feeling will be introduced to and stamped upon the boys. The religious element has the peculiarity of pure air, clear sunlight, and pure water, — every earthly being absorbs it, and in each it forms itself into another form, figure and color; in each it produces differing expressions of life.

Take a simple religious expression which each boy can understand by and in his own life; let six, twelve, or more boys appropriate it, and it will sprout out on the life-tree of each as a shoot peculiarly belonging to each

But of course the words must touch life in the boy. With the *child* the requirement to give life, form, and significance to words, must not be made, but the words must give language to the life and forms already existing in the mind of the boy; and this life and these forms must thus obtain significance through the words.

So a boy scarcely six years old, each evening begged one of his foster-parents who was taking him to bed, "Teach me a little prayer;" and having said the prayer he fell asleep quietly. One day something occurred which showed him not to be quite serene in his inner nature. The little prayer in the evening commenced as usual; strongly and clearly he repeated it: but a slight turn in it pointed to the occurrence of the day, and suddenly voice and word were hushed, so as to be scarcely audible; but certainly the inner nature spoke only the more loudly. Yesterday he said to me for the first time on going

to bed, "Pray the little prayer with me": a sign to me that there must be something which lay on his conscience. I suited the prayer to what I believed to be his need, and he slept quietly.

Shortly after, the same boy came to me and brought a picture he had just found. He was delighted with it as it was painted in bright colors. But at the moment he was about to show it to me, there came up a boy about one year and a half older, very lively, and apparently one who gave little attention to the inner life. "That is cruel," said he, looking at the picture, which represented the treatment of the Greeks, especially of the women and children, by the Turks. The children were told how much cause all who enjoyed an unpersecuted, much more a faithfully fostered life had to thank God for it. "As we do morning and evening," quickly interrupted the livelier boy, although no particularly explanatory word had been said to him about it.

From which we infer that it is neither necessary nor advisable to make, with younger boys, a too frequent change in the expressions which give language and significance to the inner life.

b.

RESPECT FOR, KNOWLEDGE AND CULTIVATION OF THE BODY.

Section 90.

Man esteems that alone which he not only knows in respect to its value, significance, and use, but which he can also apply and use, and concerning which he knows that on its good qualities, and therefore on the maintenance of these, depends the attainment of the work and aim for which he strives. We do not at all believe that man, especially in boyhood, knows his body because it is so near to him, still less that he knows how to use his limbs because they are one with his body. "Do not carry yourself so awkwardly," we hear frequently said to boys, especially in stations of life in which all-sided corporeal activity does not belong to the order of the day in childhood and early boyhood.

We see that men with whom spiritual and corporeal cultivation do not keep pace, and reciprocally limit each other, at certain times and under certain circumstances do not at all know what they shall do with their bodies and limbs. Indeed to how many a one does not his own body appear as a burden! how many a one does not feel his limbs as such!

Now an occasional cultivation of the body by bodily activity at home can help many. But since, in almost all cases, this cultivation is very subordinate, and in most is applied only in a one-sided manner; and since man must become conscious, not merely of his powers, but also of the means of using them, — only an all-sided cultivation of the body, and of all parts of the body, as the means and expression of spiritual training, can lead him to this consciousness. This idea is expressed even in the simplest instruction where the use and position of body and limbs is essential, for instance, in writing, drawing, learning the use of musical instruments, etc.

If the scholar has in such cases received no true all-sided cultivation in the use of his body and limbs, and if this use of body and limbs has not been exercised to the point of becoming an abiding quality, a course of training and breaking in, deadening alike to teacher and scholar, can only lead to a poor aim; and the continual, "Sit up straight," "Hold your arm right," drives all life and success out of the instruction.

But active, vigorous bodies in all positions and for all employments of life and calling, dignified carriage and deportment, is but one effect of all-sided cultivation of the body as the bearer of the spirit. A great deal of so-called unmannerliness, rudeness, and impropriety, would vanish, especially in boyhood; and we should not so often have to say and hear, "Do not be so unmannerly," "Do not be so rude in your expressions," "Stand properly," if we gave our children legitimate bodily exercises, advancing from the simple to the complex, claiming and cultivating man on all sides; that is, bodily exercises in accordance with the cultivation of the spirit, referring to and conditioned by this cultivation.

The will as such does not yet govern the body at every instant; the body must therefore be fitted at every instant to obey the demands of the spirit, as he who plays upon a musical instrument plainly shows.

Therefore, without such a training of the body, there is no education leading to the perfection and the complete cultivation of man. Hence the body in this respect, as well as the spirit, must go through a true school; and bodily exercises must be strictly carried on, advancing from the simple to the complex, and referring to the spiritual in man, as an object in each school; for they lead to true breeding. Breeding is to bring the boy back strictly and firmly in all his actions to the worth of man, which has become perceptible to,

and is felt by him; to the highest esteem for his nature which flows from this perception; that is, to let the worth of man, and esteem for his nature, be prominent, and express themselves in all his actions. This is the positive element in his education at this age; and the more vividly and plainly the boy and scholar divines and perceives the nature and the worth of man, the more clearly, simply, comprehensively, and necessarily do the requirements which proceed from the whole nature of man express themselves to him, so much the more earnestly and firmly must the educator insist on the fulfilment of these requirements. Indeed, if it should be necessary, he ought not hesitate to proceed from admonition to punishment, to severity, for the sake of the welfare of the pupils. The scholar time, the boy time, is the time for breeding. Only the cultivation of spirit and body in unison and accord makes true breeding possible.

Besides, the body also, or we might just as well say the mind demands, after a laborious activity of the latter, a strictly methodized laborious activity of body, and this strict bodily activity thus methodized exerts again a strengthening reflex influence on the mind. There is true life, therefore, only where bodily and spiritual activity stand in methodized, active, reciprocal connection.

But the bodily exercises have still another important side: it is this,—that they lead the boy at a later time to the vivid recognition of the internal construction of his body; for here especially the boy feels vividly the inner, reciprocal, active connection of all the parts of his body. These perceptions, connected with only measurably good pictorial representations of the internal construction of the human being, must necessarily cause, at least must induce an active participation in the above-mentioned vivid recognition of and insight into the construction of the human body and the attention to, and tendance of it, dependent on this recognition and insight.

c.

CONTEMPLATION OF NATURE AND OF THE OUTSIDE WORLD.

Section 91.

What was before done in this respect in childhood was isolated, and so without special coherence; but now it appears arranged as much as possible in inner, necessary coherence suited to the course of man's development at this stage, and so, soon again ramifying and

dividing, as the special and individual always proceeds from the general and whole.

The recognition of each thing, of each being, of its destination and properties, proceeds everywhere most precisely and clearly from the local references and relations of objects in which the things stand, and expresses itself most loudly and clearly in such references and relations; therefore the boy and scholar is necessarily brought to the clearest insight into the nature of objects, of Nature, and of the outside world in general, when the things are brought before him, and recognized by him, in the natural connection in which they stand.

Further: the relations and proportions of objects, and their significations, are naturally the plainest and clearest to the boy where he sees himself most impressively and constantly surrounded by them and their effects; where, perhaps, the cause of their existence lies in himself, or at least proceeds from and relates to him.

These are the objects most closely surrounding him, — the objects in the room, in the house, in the garden, the yard, the village (the city), the meadow, the field, the wood, the plain. From the room, his nearest surrounding, this arranged and arranging contemplation of Nature and the outside world proceeds, passing from what is near and familiar to what is farther off and unfamiliar; and, on account of this order, this summing-up and dividing now appears as an actual school-subject.

The course of teaching is as follows. The instruction again begins with the pointing-out of the object, which has before been recognized as necessary. Thus, for example, pointing to the table, —

"What is that?"

pointing to the chair, —

"What is that?" and so on.

Now the summing-up question,

"What do you see here in the room?"

"The table, the chair, the bench, the window, the door, the flower-pot," and so on.

The teacher writes down upon the slate the objects named by one or more children, and then repeats them in concert with the scholars. The teacher further questions: —

"Do the tables and chairs stand in the same relation to the room as the window and door?"

"Yes." — "No."

"Why yes?" — "Why no?"

"Now what are window and door in relation to the room?"

"Parts of the room."

"Tell me all of the parts of the room you know."

"The walls, the ceiling, the floor, and so on. All these are parts of the room."

"As the door, the window, are each a part of the room, is the room itself a part of any greater whole?"

"Yes: of the house."

"What else are parts of the house?"

"The house-floor, the chamber, the kitchen, the staircase," and so on.

After the scholars have named all the parts of the house, teacher and scholars repeat together, as usual, —

"The house-floor, parlor, chamber, kitchen, staircase, garret, cellar," and so on, "are parts of the house."

The recitation in concert, by all the scholars, of what has been before said is highly important as an exercise of perception, conception, designation, and readiness of speech.

"Have all houses the same parts which this house has?"

"No."

"What parts has this house which other houses have not?"

"What parts have other houses which this house has not?"

"By what are the most essential parts of a house conditioned and determined?"

"By the use of the house or building, and what it is meant for.

"What are the most essential parts which each dwelling-house must have to be called a complete dwelling-house?"

"Besides the objects which are parts of this room, you named others which are not parts of the room, but which you see in the room: name to me again several of these."

"Chairs, tables, flower-pots, paintings, engravings, books," and so on.

"Do chairs, tables, and benches have the same relation to the room which paintings, flower-pots, books, and such things do?"

"No."

"Why?"

"Now, what are benches, tables, and such things in relation to the room?"

"They are necessary to it; they belong to it."

"All the objects which belong to a room are called the furniture of the room."

"Tell me all the objects which you know to be the furniture of the room."

"Has each of the other spaces in the house objects which belong to it?"

"Yes: the kitchen, the chamber," etc.

"What objects belong in the kitchen, in the chamber?" etc.

"These objects are called kitchen-furniture, chamber-furniture," etc.

"But are there not also in a house pieces of furniture which do not belong exclusively to any single space or room?"

"Yes: this, this."

"Such things, as well as all the furniture that belongs in a house, are called house-furniture."

"Tell me all the house-furniture you know."

"The house has its particular parts, rooms, and spaces; but is not the house again the part of a greater whole?"

"Yes: of the premises."

"What objects belong to the premises?"

"The yard, the garden, the house, the wash-house, the barn," etc.

"What kind of objects are in the yard, and belong to it?"

"The movable objects which belong to the yard are called yard-furniture."

"What belongs in the garden, and is used for garden-work?"

"All the movable objects which belong in the garden, and are used for garden-work, are called garden-furniture."

Etc., etc.

"All the furniture which belongs to the yard, to the garden, to the barn, to the wash-house, is called domestic-furniture."

"As the house and yard are each a part of the premises, are the premises a part of any greater whole?"

"Yes: of the village."

"What do you see in the village which belongs to it? which together form the village?"

"Houses, wash-houses, gardens, yards, churches, schoolhouses, parsonages, the common, the public hall, the smithy, wells," etc.

"What have the houses of the village in common in respect to their occupants, or peculiar to some of them?"

"They are either farmers', mechanics', or laborers' houses."

"What is the peculiarity of the farmhouses?"

"What is essential to a mechanic?"

"The workshop."

"What belongs in the workshop and to the workshop?"

"The tools."

"What belongs in the public hall?"

"What belongs in the schoolhouse?"

Etc.

"What belongs to the church and in the church?"

"What is outside of the village, and surrounds it?"

"The plot of ground belonging to the village, or the limits."

"What is the village in respect to the plot of ground, or the limits?"

"The middle point."

"What objects do you see in the plot of ground, in the limits?"

"Fields, meadows, roads, paths, streams, ditches, bridges, grass-plots, stones, and fir-trees which mark the boundaries."

Etc.

"Is the plot, or are the limits, part or parts of a greater whole, as a yard is a part of the premises?"

"Yes: of the landscape."

"What did you see, and what do you see, in the landscape?"

"Mountains, valleys, hills, dales, roads, bridges, high-roads, rivers, brooks, villages, mills, cities, castles, ponds, canals, forests," etc.

Geography as an independent subject of instruction develops from this point.

The contemplation of the outer world has this peculiarity, which is therefore conditioned in it, that from it all directions of information about objects and things develop at precise necessary places, like the buds and twigs in the branches.

This peculiarity will repeatedly express itself in considering a course of instruction which conforms to the laws of Nature and reason. In general, the place for the introduction of each new, independent subject of instruction, is determined without arbitrariness, as firmly and necessarily as the ramifications of symmetrically arranged plants. Of course the indication for this is often very slight, like the desire of a new bud to sprout forth; and often makes itself known only in a quiet disposition of spirit and mind on the part of the teacher, in which he, quietly observing the requirements and limitations of the subject of instruction, wholly yields to them; or rather, in which the

subject so wholly lives in him, that its requirements and its nature express themselves directly in his mind and spirit, he, as it were, perceiving them directly within himself. But if the instant when the new twig of any subject of instruction desires to shoot forth is allowed to pass by unnoticed, each later or earlier, consequently arbitrary, introduction and reception of the subject of instruction (which is yet recognized as necessary) is always a lifeless one, and, though there is nothing to be said against the necessity of the subject of instruction, it yet appears as an adjunct, and works only as such.

Every teacher striving with genuine love and faith, after a spirited instruction in accordance with the laws of Nature and reason, will certainly experience this fact often and painfully, if in a conceited, dogmatic, gloomy, or dull mood, he has overlooked the moment of sprouting.

He will exert himself without result; his course of instruction will be automatic, and, like a rattle, empty and lifeless.

Therefore, certainly, this observation of the instant in which, and the place at which, a new subject of instruction makes its appearance as a new ramification, is most important to a spirited, life-giving, and life-awakening instruction.

The nature of a life-awakening and developing instruction in accordance with the laws of Nature and reason, consists mostly in discovering and holding fast this point; for, if it is truly found, the subject of instruction goes on developing independently according to its own abiding active law, like every other life-whole, and thus, in a very real sense, teaches the teacher himself.

Therefore all the teacher's attention must be directed to this sprouting-point of the ramification of instruction, lest it slip by.

The neglect of this requirement, and the results of this neglect, will mark the manner of instruction and the course of teaching not in accordance with the laws of Nature, a manner and course which destroy themselves.

We return, after this interpolation, to the course of teaching the boy to comprehend the outer world.

"In the surrounding country you saw trees, towers, rocks, springs, walls, forests, and villages; look at all these and at all the other objects in sight, and see whether each of these things is the only one of its kind, or whether several can be grouped together as being of like kinds."

"Several things belong together as being of like kinds."

"Name several things which you think belong together as being of like kinds."

"When you compare with one another the numerous things in sight which belong together, do they show a fundamental difference?"

"Yes: some things are made by man, and some by Nature."

"The first are called *works of man;* the second, *works of Nature*, or natural objects."

"Find out several works of Nature which are in sight, and which you know."

"Trees, fields, meadows, grass, brooks, ditches," etc.

"Find out several works of man which are in sight, and which you know."

"Walls, fences, hedges, paths, arbors, vineyards," etc.

"Can fields and meadows be called pure works of Nature?"

"Yes." — "No."

"Why yes?" — "Why no?"

"Can arbors, hedges, vineyards, and the like be called pure works of man?"

"No."

"Why no?"

"Such objects as arbors, vineyards, fields, meadows, and improved fruit-trees, are called *works of Nature and man.*"

"Mention several *works of Nature and man* in your neighborhood."

(Repetition in concert by teacher and scholars, as always.)

"Find several natural objects within your range of vision, examine them closely, compare them with one another, and see if you perceive any further separating or uniting fundamental and principal differences among them; for example, —

the tree,
the rock,
the stone,
the river,
the bird,
the oak,
the deer,
the fir,
the thunder,
the lightning,
the air."

"They show separating and uniting differences."

"Good. What differences?"

"Deer, bug, cow, bird, snail, are *animals*."

"Pine, oak, moss, grass, are *vegetables, plants*."

"Air, water, stone, rock, are *minerals*."

"Rain, thunder, lightning, are natural phenomena."

"Mention all the *animals* with which you are familiar in your neighborhood."

"Name the *plants*."

"Then the *minerals*."

"Finally, name *the natural phenomena*."

"Now consider *the animals* in respect to *the place* in which they live."

"Are they born, do they live and feed, in places of the same kind, or of different kinds?"

"In places of different kinds. They live either in the *house*, the yard, the premises, or in *the open air*; and then

in the field, on the *plain*, or in the *wood*;
on the *land* or in the *water*;
in the *air* or in other things."

"Animals which live in the house, belong to the house, and which keep principally to men and their dwellings, are called *house-animals*."

"Animals which live principally on the plain are called *plain-animals*."

"Animals which live principally in the woods are called *wood-animals*."

"Animals can also be classed as *land-animals, water-animals, animals which live in both air and water* (amphibia), *air-animals*," etc.

As the animals were considered in respect to the place in which they principally live, the plants and *vegetable growths* should be carried through by the teacher, as *house-plants, greenhouse* and *hot-house plants*, as *room, garden, field, meadow, wood, water, swamp*, and *parasitic vegetable growths*.

The *minerals* are carried through in the same way, though they offer fewer differences in this respect. In a similar way and according to similar respects, the natural phenomena are carried through as *phenomena* of *earth, air, water* and *fire*.

"In what reference, and according to what respects, were the objects of Nature hitherto considered?"

"In reference to the place in which they are born, and in which they live."

"Do the objects of Nature come nearer to or farther from people according to the place in which they live? Is there any difference in the way of living, the behavior, the utterances and qualities, of the objects of Nature, according to whether they are nearer to or farther from people?"

"Yes."

"No."

"Why yes?"—"Why no?"

The objects of Nature which are nearer to men, and more subject to their influence, are weaker, more sensitive, needing more care, are more tractable, etc.; they are generally more *tame;* the objects of Nature which are remote from man, and less subject to his influences, are more *rough*, are *wild*.

"Mention the *tame animals* in your neighborhood which you know."

"Mention the *wild animals* in your neighborhood which you know."

The tame animals can also be considered in reference to their usefulness and *use*, and here as *useful* animals, animals which afford *protection*, animals which are used for *pleasure*, beasts of *burden*, *draught* animals, etc.

The wild animals can be considered as *useful* and *harmful* animals.

The plants and vegetables can be considered in the same way.

The *tame* plants are also called *cultivated plants*, etc. Something similar may also be said of the minerals; for example, wood-streams and well-water, rocky soil and cultivated grounds, etc.

"As you have hitherto considered the objects of Nature familiar to you, and which are in your neighborhood in reference to the place in which they are born and in which they live, can they also be considered likewise in any other similar respect?"

"Yes," in reference to the *time*, for example:—

Winter and summer fruits;
Spring, summer, and autumn flowers.

Animals, plants, and the phenomena of Nature can also be considered in this way, for instance:—

In winter the northern lights;
In summer thick fog;
In spring and autumn, mist;
In winter, snow, ice, hoar-frost.

So with us

the swallow is a summer bird;
the lark and water-wagtail are spring birds;
the snow-goose is a winter bird.

So there are day-butterflies, hawk-moths which fly usually at twilight, and night-moths.

So there are May, June, and July bugs.

So March blossoms (snowflakes), May blossoms (dandelions), spring blossoms (snowdrops).

But the animals, especially the birds, can also be considered in respect to *place* and *time* as spring and autumn birds-of-passage.

The consideration of the animals in respect to their *manner of living* is especially important here, for example: —

Flesh-eating, *rapacious* animals;
Grass-eating or *grain*-eating animals, etc.

Here now the especial knowledge of natural objects, the *descriptions of the objects of Nature*, and, later, *natural history*, which has to do with the discovery and perception of the more inward properties, especially those which relate to the construction of the members, immediately follows as a new and independent subject of instruction, as did *natural philosophy* before, with the consideration of the phenomena of Nature dependent upon the operations of the powers, etc. The consideration of the minerals also necessarily points to physics.

The transition from the general consideration of Nature (as a consideration of the outer world) to the science of Nature, the description of the objects of Nature, and natural history, makes the next consideration, that of the creatures which are nearest to man by their life and their usefulness or harmfulness. Then follows the distinction of those which are born alive (mammalia) and the egg-laying creatures; between those creatures which lay eggs and brood them, and those which only lay eggs, leaving their hatching to Nature, etc.

The science of Nature and the description of the objects of Nature have later to do, first of all, with the comprehension and seeking out of the distinguishing, separating and uniting outward properties of the objects of Nature, of their conditions and causes, of their effects and consequences; and especially with the discovery and recognition of the natural classification and necessary connection of the things of Nature — a classification and connection which proceed from these properties — and with the comprehension of the external properties

by which the inner nature of the thing expresses itself outwardly, most unequivocally and peculiarly.

By the ascent from the especial and individual to the general and the most general, and the descent again from the general to the especial and most especial, by this fluctuation, as it were, of the course of instruction, especially of the consideration of the outer world, the course of instruction not only corresponds to life itself, but it becomes equally possible to exhaust the knowledge of each object for each stage of the intellectual development and power of comprehension of the scholar.

As, in what has gone before, the objects of Nature were considered and comprehended in all their outward evident references, — in respect to place, time, manner of living, expressions of life, etc., — and all was said that could be said about these references, the *works of man* can be outwardly considered in a quite similar way.

"Seek out works of man which you know in your neighborhood and within your range of vision, and see if they show any difference and what differences they show."

"The house, the village, the high-road, the bridges, the city, the walls, the plough, the boundary stone, the wagon, the sign-post," etc.

"Well, what differences do they show?"

"They are different in their origin, their material, their use and object."

"Seek out works of man which are different in their use and object."

"What differences do they show in this respect?"

"They serve man for dwellings, or for use and protection, or as tools and utensils with which to make something; they serve for convenience, and especially make it easier for men to get together, or for pleasure, or they are mere results of man's power and man's mind."

"What works of man are there which give to man a dwelling-place and an abode?"

"Houses, villages, cities."

"What has a city, which is peculiar to it?"

"Streets, alleys, market-places, town-hall, stores, workshops, and, in short, very different kinds of buildings."

"In what are the buildings of a city especially different?"

"In their use, in the purposes for which they were meant."

"What difference do the buildings of a city show in the purposes for which they were meant?"

"They are dwelling-houses, houses for work, public buildings, buildings for pleasure, and buildings for beauty."

"What are the different kinds of business houses?"

"Workshops, manufactories, stores, warehouses," etc.

"What different kinds of *workshops* are there in a city?"

"The shops of cabinet-makers, smiths, tailors, saddlers, belt-makers, shoe-makers, carriage-makers, bakers, tinmen, weavers," etc.

"What is peculiar to each workshop?"

"The tools."

"What tools belong in the cabinet-maker's shop?"

"What tools belong in the smith's shop?"

And so on with each shop.

"For what purpose are the workshops meant?"

"To produce, to make, to form something."

"What is produced in the cabinet-maker's shop?"

"What is made in the smith's shop?"

And so on in each shop.

Likewise with the different manufactories; "first, what stuff and working implements do they contain? secondly, what is produced in them?"

So with the warehouses; "for what do they serve? and what do they contain?"

"Are the *stores* also different?"

"In what are the stores essentially different?"

"In what they contain."

"What differences do the stores show in respect to what they contain?"

"They contain

either productions of Nature and skill, which are principally sold by *weight*, and especially adapted to the food of people;

or they contain productions of skill, which are principally sold by *long measure;*

or they contain all kinds of trifles, either for use and necessity, or for beauty and ornament, and so on, which are sold according to their own individual value and by *number*," etc.

"The first are *groceries;* the second *dry-goods stores;* the third can again be very different, according to their contents: —

hardware stores,
toyshops,
millinery stores," etc.

"What does a grocery contain that is essential to it?"

"What essential difference do all these goods show in reference to the place where they are produced?"

"They are either native or foreign."

"Name some native groceries."

"Name some foreign groceries."

In the same way, what is most essential and peculiar to each store is brought forward and taught.

The public buildings also are distinguished and grouped according to their use, as buildings for instruction, houses of correction, buildings for the worship of God, for nursing and charity, poorhouses, police-stations, court-houses, buildings for amusement, memorial chapels, etc.

So will also the contents of these public buildings be gone through with according to their use; for example, the buildings of instruction, the printing-offices, etc.

Now the consideration rises from the work to the master of the work, from the product to the maker, from the effect to the cause; therefore from the works of man to man, as, from the consideration of Nature to its Creator, God.

"What are those people called who work in the cabinet-maker's shop, and make the things which come from it?"

"Joiners," etc.

"What are all those people who work in workshops mostly called?"

"Mechanics."

"Are the working-places of other producers of external works also called workshops when the producers are not mechanics?"

"Yes: the sculptor's shop."

"Are there also mechanics who have no special place for working, no special workshop?"

"Yes; the masons, the carpenters, the plasterers."

"What are those persons called who work in manufactories?"

"Manufacturers."

"Tell me all the kinds of mechanics that you know."

(Likewise all the kinds of manufacturers.)

"Do the different trades (likewise the manufactories) group themselves according to their destinations, as belonging together?"

"Yes."

"According to what respects and destinations are the mechanics grouped?"

"According to the material they use, and therefore according to the kind of work they do; for example the worker in wood."

"Can the different outward results of man's activity, considered according to their special destinations, also be grouped and separated?"

"Yes; either according to the material, or their origin, or their use."

"How can the different outward productions of man be considered in respect to their different material?"

"As productions of the stone, plant, and animal kingdoms. The *material* may be either principally and exclusively stone and mineral; or exclusively and essentially wooden and vegetable; or metal; or stone (mineral) and wood (vegetable); or stone and metal; or wood and metal; or wood and stone; or finally, the productions may be especially of animal material, or of mixed and indeterminable material."

"How can the different outward productions of man's activity be distinguished and grouped, according to their *use?*"

"As protective works, useful works, works of pleasure, works of art, memorial works, and works of magnificence."

The dwellings, the clothes, the fortifications, the weapons, can be considered as protective works, and all can again be distinguished according to particular respects; thus, for example, the weapons, as shooting, stabbing, and cutting weapons.

So the works of *use* as works for the maintenance of social order and social intercourse; for example;

bridges, high-roads, boundary-stones, sign-posts, etc.; or as works for production; such as working-tools, implements for service, materials.

"The *tools* can again be considered and grouped, as:—

separating tools,
boring and puncturing tools,
thrusting and striking tools,
drawing and smoothing tools, and
stamping and pressing tools.
"Seek out *separating tools.*"

"The axe, the wedge, the chisel, the hedging-bill," etc.

These can again be considered, as:—

cutting and *chopping* tools,
sawing, splitting, and *breaking* tools.

"Name several examples of each."

"Seek out *thrusting* and *striking* tools."

"Hammer, ram, pestle, mallet," etc.

"Name the *boring* and *puncturing* tools."

"Gimlet, auger, wimble, awl, paling-iron, needle," etc.

"Name the *drawing* and *smoothing* tools which you know."

"The rasp, the file, the polishing-tooth, the plough, the harrow, the whetstone, the folding-stick, the plane."

"Seek out *stamping* and *pressing* tools."

(As always, the discoveries made are repeated by the teacher and children together.)

Just so with the *implements* of *service*.

"What is the difference between implements of service and tools?"

The materials have been mostly already considered. In a similar way, the works for pleasure, the memorial works, the works of magnificence, and especially the works of art, are considered. As before, the contents of the public buildings were considered, so now is their use.

"For what are the town-hall, the court, and the guard-house intended? and what is done in each?"

"For what are the schools meant?"

"For what are the churches meant?"

"What are the *persons* called who employ themselves in the town-hall, in the court, and in the church as such?"

"Judges, lawyers," etc.

"Aldermen," etc.

"School-teachers," etc.

"What is the business of the lawyers," etc.?

"What is the business of the aldermen," etc.?

The same with the school-teachers and ministers.

"Does the *city* only show all this?"

"What makes a city a city?"

"Are there different kinds of cities and towns?"

"Yes, — country towns, county towns, capital cities, sea towns, commercial towns, and university towns."

"What is the essential peculiarity of each of these towns and cities," etc.?

"And of their inhabitants?"

"Are there other activities, employments, and ministries of men, which have not yet been named?"

"Yes, many."

"What?"

"The employments of the handicraftsman who is not exactly a mechanic, of the day-laborer, of the hunter, fisher, gardener, farmer, grazier," etc.

"Is there, or is there not, a certain resemblance or likeness among the different activities and employments of men?"

"Yes; there are precisely grouping resemblances and likenesses."

"What?"

"Have all the different activities of men an object?"

"Are the different objects of man's activity of one kind, or of different kinds?"

"What is the final object of all man's activity, of all man's working and creating?"

"Since the final object of all human activity, of all human working, is one only, do men live, and have men lived also, in one and the same relation, whatever employment, and whatever work, they may have besides?"

"Yes, — in the family relation."

"Since all men, without exception, live and have lived in family relation, but since, also, all men strive towards the highest and last aim, viz., the purest representation and the attaining of the clearest consciousness of the nature given by God to man, where, therefore, will men be most certainly and surely trained to the attainment of this last aim of their activity and effort? and where must they be developed to the attainment of this aim?"

"In the *family*."

"What are the outward limitations of a family? and what are the essential members of a family?"

"Father, mother, child, and also the servants."

"How must, therefore, a family be constituted, if man is to be represented by it, and developed through it for the highest and ultimate end of life; if in it and by it man is to reach to this end?"

"It must recognize this ultimate end and the means of reaching it; must understand the way and means of reaching it; and must assist this by its powers, capacities, insight, and means, according to the determinations and requirements of the highest end, and having this only in view," etc.

"Even though a single family corresponded to all these requirements, would it be in a condition to reach the highest and ultimate end of human effort by itself?"

"No."

"Why not?"

"Because it is impossible for a single family to contain in itself all powers, capacities, and means for this purpose."

"Then how will the ultimate end of man be most easily and surely reached?"

"When several families, recognizing the highest end of human life and effort, understanding the means for reaching this, and mutually benefiting, and assisting each other by their powers, knowledges, and means, unite for this highest end.

"Only the human race as a whole, as a unit, can reach the highest and ultimate end of all human effort, — representation of pure humanity."

Thus, after a great circuit and many windings, the scholar has returned to the house and the family-room from which he started at the beginning of the contemplation of the outside world and of Nature; he has returned to the middle point of all earthly human impulses and efforts, though with other eyes and senses, although the objects of the outer world were for the most part only outwardly brought forward and contemplated. He has found man in his different relations to the things of the outside world; he has found — himself.

This subject of instruction, being the first, was, for that reason, carried out to such an extent in order to show how all instruction must proceed from the scholar and his nearest surroundings, must refer back and return to man.

It scarcely need be said to those who think, though not deeply, that the answers last pointed out, in the completeness and coherence in which they are given, neither should nor could be given by the scholars, even by those who have advanced in age during the course of the instruction; but the conceptions which these answers contain should be developed in the scholar. And he is certainly sufficiently developed to be able to receive these conceptions, even at his still inferior stage of judgment.

Just as little does it need to be said to those who think, that, since the instruction is and must be connected with the locality of the scholars, therefore, in the application of this, every thing must be excluded which is outside of the scholar's sphere of life. It should

merely be pointed out how this contemplation of the outside world and Nature, according to a law and course of teaching contained in it in unity and wholeness, embraces all which Nature and the outside world bring before the observer. Yet some similar references, as, for example, to the business or the higher spiritual activities of man, to all declared relations and efficiencies of man, present themselves; and, the more rarely and recedingly they present themselves, the more necessary it is to comprehend and retain them in order to connect with them higher and further developments. For who does not see what obtrudes itself for observation and judgment (with the degree of at least external cultivation now becoming general), even into the life of the country-people living in the greatest retirement, since not only the consideration, but also the penetration and control of the higher relations of life and Nature are becoming more and more what they should be, — a problem for the whole human race to solve?

It would also not be considered necessary to give thinkers (and only thinkers should teach and instruct) the sprouting-point for each new twig of instruction; for instance, for the so-called science of Nature (physics) in the phenomena of Nature, the remarkable coming out of inwardly working powers; for chemistry, likewise in certain phenomena of Nature, the change of matter, either by the influence of general activities of Nature, such as light and heat (as, for example, with the coloring, the strong aromatic odor of certain leaves in autumn, decay, etc.), or by the influence of matter on matter.

So the sprouting-point for technology is in the consideration of the trades, etc.

It is generally well for the teacher to find all this for himself; the recognition is then more vivid, and the instruction gains in interest.

And why should not every thinker find within himself the right way, if he only faithfully and willingly, without sophistry, scepticism, or self-conceit, allows himself to be guided by the spirit? In all men and in all beings there works but the One Divine Spirit given to them all.

And even the experienced teacher, though he should teach again and again the simplest things, will learn by teaching (at least it has always been so with the writer up to present time).

From what other source came to the teacher the strength and courage for teaching, — the courage which he can so easily lose by the hindrances and difficulties arbitrarily laid in the way by ignorance and prejudice?

Therefore there will be raised, in reference to the scholar, the further objection, — "How can the boy, especially at the age here supposed (from six to eight years, perhaps more), already possess the knowledge here brought forward? The adult himself scarcely possesses such knowledge."

He cannot now possess it; but it is to come to him gradually in the course of instruction; and it certainly does come to him as has been shown by frequent repetitions of this course of teaching, the outward form of which comes mostly from the scholars. Also there will be roused in the boy such a habit of observation of the objects of Nature and the outside world, that scarcely any thing of even slight importance escapes his notice, and he thus certainly affords supplementary certification to that to which his attention was called in a former study-hour. So man learns early that which his destination requires, — to observe and to think.

Besides, even the boy, and still more the man, knows more than he is conscious of knowing.

Now it is said that such an instruction would lead the boy too early out of his natural narrow bounds; that he would become vain of his knowledge through the manifoldness which he receives into himself.

Manifoldness of knowledge in *necessary living connection* never causes vanity; for it makes man thoughtful, and shows him that he on the whole knows but little. The former effect raises the human being to a man; the latter gives him his finest ornament, — modesty.

Yet how would it be possible to meet all the objections and contradictions that have been brought forward, and may still be brought forward?

Therefore we leave the nature, compass, and effect of this subject of instruction and this course of teaching, to the consideration of one and all; for there is much, very much more to be said concerning the importance of this course. Rightly known and rightly comprehended, it can be applied and carried out in the most inferior school; and it vindicates itself, for it places man early, in a simple, animated manner, in the middle point and inner coherence of all that which offers itself outwardly to man's recognition and even presses itself upon him for consideration. Thus this course leads man to thoughtfulness, to knowledge and conception of the nature, the ultimate cause, as well as of the ultimate end, of all things. This knowledge, and a use and application of it wholly in accordance with it, is indeed

the final aim of all instruction, however different may be the names by which it is called.

d.

APPROPRIATION OF LITTLE POETICAL REPRESENTATIONS COMPRISING NATURE AND LIFE, AND USED ESPECIALLY FOR SINGING.

SECTION 92.

Nature and life speak very early to man; but they speak softly, so softly that the yet undeveloped sense of the boy, the yet unpractised ear of man at this stage of development, still receives with difficulty the language and tones of life and Nature. This unpractised ear indeed receives and feels them, but the boy does not yet understand how to point them out, how to translate them into his language, how to express them in his own language. And yet, soon after he first feels and knows himself as differing from the outside world, the yearning arises in his mind to understand the life and language of the outside world, especially of Nature, and the anticipation also arises that he will at some time receive into himself the life which enters everywhere from without, and make it his own.

The seasons, as well as the time of day, come and go. The spring, with its germinating and sprouting and blossoming, fills man, even in boyhood, with pleasure and life; the blood flows more quickly, and the heart beats more loudly. The autumn, with its falling, colored, and variegated leaves, and its aromatic fragrance, fills man, even as a boy, with yearning and anticipation. And the rigid but clear, constant, and steady winter awakens courage and strength; and this feeling of courage and strength, endurance and renunciation, makes the boy's heart and mind free and glad. Therefore he scarcely exults as much over the first birds and blossoms of spring as over the first snowflakes, which promise his courage and strength a smooth, quick passage to a distant goal.

All these feelings are presages of the future life; they are the hieroglyphics of the quiet and still slumbering inner life; and when rightly recognized, estimated, and understood, they are angels who lead man in and through life: therefore they should not be lost for man, they should not be allowed to pass away into empty vapor and mist.

And what does our life have, if our childhood and youth were poor and empty, — poor in and empty of fresh, aspiring and hoping, antici-

pating and believing sensations and feelings which elevate living forms and life, — poor in and empty of having felt and become conscious of our nobler selves?

If we will but admit it, is not our childhood and youth — the aspiration and hope, the anticipation and belief of our childhood and youth, especially of our boyhood — the inexhaustible fount from which we in later life, and for our later life, obtain strength, courage, and endurance?

Is not

"The heavens declare the glory of God," etc., and

"Blest is the man who fears the Lord," etc., in spite of all his errors, the fundamental thought in the life of the bard of God and of Nature?

And although this thought does not express itself for us in our earlier life, yet the later time shows that, even in the earliest stage of life, this thought worked in it, dwelt in it, and moved it.

And did not the former psalm proceed from the observation of Nature, and the latter from the observation of life?

Was not, likewise, the fundamental thought in the life of the Saviour of the world, "consider the lilies of the field, and the birds of the air, God clotheth and feedeth them; how much more shall he not care for his children in all the occurrences of life"; and "I must be about my Father's business?" — and are not both of these expressions founded on the thoughtful reception of Nature and life?

But not only do Nature and life speak to man, but man also would willingly express the conjectures and sensations which are awakened in him by the speech of Nature and life, but for which he cannot find words. And these words should now be given to him according to the demand of his mental development, — the development of his inner sense.

The relation of man to man is neither as external as some imagine, nor as easily communicable in its inwardness as others believe. It is indeed full of deep meaning and high significance; but its soft accords must be early fostered in the boy, but more indirectly than directly by words demanding subtle reasoning. The direct demand fetters, obstructs, deadens, trains the boy, and makes of him a puppet. The indirect suggestion (for instance, in song without moralizing application) gives to the mind and will of the boy the inner freedom which is so necessary for his development and strengthening; only here, again, the outer and inner life of the boy must be in accord with it, which

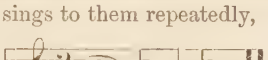
is, of course, the first and inalienable requirement. The more rare and the more withdrawn from observation this may be in life, the more should it be fostered where it is possible; and even the instruction which otherwise scarcely touches the life, the school otherwise separated from life, should foster it.

Let us enter a schoolroom where at this moment such an instruction, in this sense and spirit, is beginning.

More than twelve lively boys of from six to nine years of age are collected, and know that to-day they will have the pleasure of singing something under the guidance of their teacher.

The boys, placed in a row, await the beginning of this instruction, the "hour," as they call it.

The teacher was accidentally absent in the afternoon. It is evening; he comes in, and sings to them repeatedly,



good-evening.

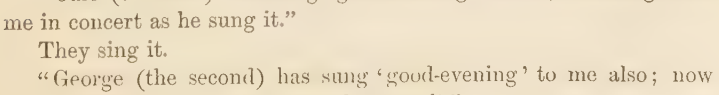
This good-evening, being sung to them unexpectedly, comes so close to their inner life that it fills them with pleasure, joy, and laughter.

Now the teacher says, "Shall I have no greeting?" and sings to them again the "good-evening."

Most of them answer in speech, "Good-evening"; some, "Many thanks"; a few say in cadence, "Good-evening."

The teacher now turns to these particularly, and says, "Sing good-evening to me."

The first sings softly; the second, jestingly; the third, etc.



Others to whom he turns sing "good-evening" in the same tones as the teacher, or in similar ones.

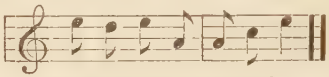
"Carl (the first) has sung 'good-evening' to me; now sing it to me in concert as he sung it."

They sing it.

"George (the second) has sung 'good-evening' to me also; now sing this also to me in concert as he sung it."

They sing it again.

The teacher now continues to sing, giving a description of the weather: —



out doors it is raw and cold.

"Is that true?" he asks. . . . "Well, then we will sing it together." (Teacher and scholar repeat it together.)

The teacher now continues his description: —

wind is blowing in the trees.

"Is this also true?" . . . "Then we will sing it also together."

Now they sing the whole together.

Now those only sing who most feel the truth of what has been said, and who best like to express it.

The instruction goes on by means of song and antiphony, holding fast the sensations awakened by the impressions of the season, and expressing them by describing the phenomena of Nature.

Ear and voice will be developed at the same time by this instruction: the sensation expressed by word and tone will become clear. To-day the outward particulars are the same as yesterday; therefore to-day also the instruction begins and continues as it did yesterday.

Having sung the same several times, one of the boys said gayly, "Shall we not soon have a little song about the sunshine?"

This question at once expressed naturally the inner wish of the boy, that after long-continuing rain, mist, and wind, the weather might be again serene and clear.

The teacher takes up the sensation of the boy, and sings to him: —

oh, bright, bright clear sunshine, come soon to us again.

The boys joyously sing this in concert.

This beginning of instruction is here communicated because it is by no means the most favorable. Raw, disagreeable autumn days, wet, cold evenings, do not call forth the inner life.

The morning, the spring, a morning walk in spring, a rest on a

hill, etc., would have been more suited to arouse the inner life. Yet now certainly the boys who have by this instruction been filled with expectation, will so much the more joyfully welcome the first clear day which shows the surrounding country in soft, woolly, snowy garments, and a clear, serene starlight and moonlight evening; and with so much the more fervor and feeling will they sing in the coming spring: —

See, the sky's serene ;
Bright flowers, and leaves so green,
In field and hedge are seen.

Or,

The green grass is growing,
The blue sky is clear,
And flowers are blowing,
For spring-time is here.

There are an abundance of judicious collections of songs and little poetical representations from which a teacher, living in his object, filled with and penetrated by it, can draw; they are sufficiently well known, and will be more so by him who seeks to become familiar with them.

If their representation and delineation, especially of the individual sensations and impressions, are not simple and short enough, a teacher who is only somewhat observant and thoughtful can easily translate the instantaneous sensations and feelings of the boys, as well as the impressions of Nature, into animated and descriptive words.

There is also no lack of representations embracing the individual life of the boy; for example: —

We children while hopping are gay,
As gay as the graceful doe ;
But we learn as well as play,
For boys to men will grow.

So, also, the individual life of one or several boys; for example: —

Dear little doves, you are so sweet ;
Come, and from my small hand eat.

The animal world in general higher reference; for example: —

Would you like a song to hear ?
Listen to the humming bee.
It hums and flies both far and near ;
Its busy skill all like to see.

Especially the relation of man to man: for example:—

If a little bird were I,
Had two little wings to fly,
I would fly to thee;
Mother mine, oh, mother! pray
Stay no more away.

Or,

When I'm with lively brothers,
And loving sisters dear,
I learn to be quite peaceful,
And sing songs loud and clear.

Or,

It is lovely to see
That the kind brothers here,
And the sisters so dear,
Can in harmony be;
When hand clasped in hand
Through the beautiful land
Of life the children stray,
When all is bright, and all is light,
To them upon their way.

Referring to the inner life of the child and boy; for example:—

THE CHILD'S ANGEL.

See through the land a gentle angel fly,
No eye can see him; he can all espy.
Heaven is his home so dear,
God sends him to us here.
He goes from house to house, and each good child
He finds with father dear, or mother mild,
He loves, and stays with ever,
And will desert it never.

Or,

Oh, time of sweet joy,
Pray never leave me,
Thy gay, youthful dress
Is so pleasant to see.

I sleep without care
While the moon shines bright;
I wake up with joy
At the dawn of light.

But it must not be forgotten, with this instruction (if it can be called instruction, since it is a representation of the child's own life), that it must proceed from the peculiar life of the scholar, and must sprout forth from it, like a bud or shoot. The experience or inner life must necessarily precede the words and tune given to the boy; and this is especially the distinctive difference of this course of instruction from that which teaches children and boys little poems and songs, which, being only from without, neither awaken life, nor comprise and represent life.

In general, all which was before said concerning the appropriation of religious expressions, especially in the beginning, is of equal value here.

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e.

EXERCISES IN LANGUAGE PROCEEDING FROM THE CONTEMPLATION OF NATURE AND THE OUTSIDE WORLD.

Section 93.

The consideration of Nature and the outside world has the objects in view purely as such, according to their total impression and their general references, particularly their reference to space. The consideration of language as a means of representation is subordinated to this; for man considers the objects for himself alone, and takes in their nature without speaking. But speech must come in as a help in giving instruction in order to prove, as well as possible, that the scholar has actually looked at, thought about, and comprehended the thing.

Now the language-exercises also proceed from the objects, it is true, but take them up with respect to their exterior and to the impressions which they make on the senses of man, and have in view pre-eminently the designation of them (which is conditioned in man, and demanded by him) by language.

The consideration of Nature and the outside world deals with the objects themselves; the grammatical exercises deal predominantly with the description of these objects by means of the audible material of language, and especially with the appropriation and use of this language as a means of description and representation, but still in inner union with the object itself.

The consideration of Nature and the outside world asks, "What

is that?" the grammatical exercise asks, "How is this denoted?" which last is language.

As the consideration of Nature and the outside world only considers the object, so the grammatical exercises consider its effect upon man and on the senses of man, and the manner in which we correctly and properly designate by speech these impressions and perceptions.

This immediately requires a third consideration, — the consideration of speech without any reference to the designated object, but merely as a product of man and of the use of his organs of speech. These exercises are the exercises in speech which are therefore again directly connected with, and proceed from, the grammatical exercises. The complete, fundamental knowledge and use of language, therefore, requires three things: —

first the consideration of the objects of speech alone;

the consideration of the outer world;

then consideration of the speech and object together proceeding from the outer to the inner world;

viz., grammatical exercises;

finally, consideration of the speech alone, without respect to the object, merely as material;

viz., exercises in speech.

The course of teaching of the consideration of the outer world was before intimated.

The course of teaching of the grammatical exercises is as follows: —

It proceeds, as above stated, from the perception of the outer world by the senses, and rises to the inner perception of it.

The teacher begins: —

"We are in a room; there are several things about us here; tell me some of these objects around us."

"The mirror, the desk, the stove," etc.

"Could several more objects be around us here in the room?"

"Yes."

"Could as many objects be brought into the room as anybody wanted?"

"No."

"Why not?"

"Because then there would not be enough room and space there."

"Why would there not be space and place enough in the room for as many things as any one wished to bring into it?"

"Because each thing takes its own room and place, its own space."

"Prove and show this to me by something else."

"Where my hand is, my slate cannot also be. Or where I am and write, my neighbor cannot also be at the same time; and I cannot be in his place at the same time with him. Or where the stove stands, the desk cannot stand also at the same time."

"Then what is meant by saying that each thing takes up its own space and place?"

"No other thing can be and act in the place where *it* is."

"In what way, and by what means, do you perceive the action and activities of objects in their space?"

"By my hands, eyes, ears," etc.

[We actually perceive the objects outside of ourselves only by taking in the nature of the things, by making it internal, that is, by receiving and experiencing it; therefore] "we call the organs by which this is done, eyes, ears, hands, and so on; and the activities, hearing, seeing, and so on, the senses."

"So we perceive and recognize outside objects by the senses."

Questioning: "By what do we perceive and recognize?" etc.

"Name the senses by which we perceive and recognize that the object acts, and does something."

"Can it be said of each object and thing that it acts, and does something?"

"Yes. — No."

"Why yes? — Why no?"

"Name something that each of the objects around us does, and by which it is noticeable to you."

"The inkstand stands.
"The pen lies.
"The mirror hangs.
"The garment lies.
"The stick leans.
"The sun shines.
"The scholar sits.
"The canary-bird sings.
"The clock goes.
"The boy speaks.
"The penknife cuts.
"The compasses pierce.
"The boot stamps."

"Were all these objects perceived in the same way and by the same senses?"

"No, I see many of them; I feel many of them," etc.

"So we perceive many of these objects in their action principally by sight, many principally by feeling or touch."

"Can I only feel and touch the activities and action of many things without seeing them?"

"Yes."

"Name some objects and what they do, which can be principally perceived by touch, without recognizing them by any other activity and action."

"The inkstand stands.
"The slate lies.
"The stick leans.
"The garment lies."

"Can I also perceive these objects in these activities by any other sense than touch?"

"Yes: by sight, by the eyes."

"Seek out objects among those you know which actually stand."

"The house stands.
"The post stands.
"The desk stands."
Etc.

[This should be repeated in concert, as before, then grouping the things, — the house, the post, the desk stands, all these objects stand.]

"Find out objects of which one can say, they stand."

"The water stands.
"The sun stands.
"The mill stands.
"The column stands.
"The blood stands
"The pulse stands."

"Name, among the objects which you know, those which lie, lean, hang, pierce, sit," etc.

"Name objects of which one says, they lie, lean, hang, pierce, sit," etc.

"Have the just-named activities and effects of the objects any thing in common?"

"What do they show in common?"

"Inward activity without outward motion, or with outward rest."

"Can you also remark in yourself, and in people in general, inward activity with outward rest or without outward motion?"

"Yes."

"The man rests, the man sleeps, the man wakes, the man dreams, the man reflects, the man thinks, the man feels," etc.

"Name objects which actually rest, sleep, wake," etc.

"Also objects which have an outward, and, at the same time, a continuously-advancing motion; such as, going, running, racing, flowing, flying, striding, dancing, hopping, springing, swimming, riding, gliding, falling, sinking," etc.

"Also objects which have outward and visible motion without continuous advance; for instance, rolling like the waves, undulating, boiling, breathing, turning, blossoming, ripening."

"Then objects which have outer and continuously-advancing, communicating motion; for example, pulling, rowing, raising, carrying, pushing."

"Objects with separating activity; such as, cutting, piercing, boring, breaking, planing, sawing, ripening, splitting," etc.

"Objects with connecting activity; for example, weaving, binding, knitting, sewing, braiding," etc.

"Objects with forming activity; for example, sculpturing, painting, drawing, writing, forging," etc.

"Objects whose activity can only be seen; as, glittering, shining, shimmering, lighting, darkening," etc.

"Objects whose activity can only be felt; for example, warming, cooling, paining, delighting," etc.

"Objects whose activity can only be heard; for example, singing, piping, flute-playing; speaking, talking; laughing, shouting; crying, howling; whining, sobbing; groaning, rattling (in the throat); ringing, rustling, creaking, clapping," etc.

"General activities of Nature; for example, storming, blowing, raining, hailing, snowing, thundering, freezing," etc.

"Objects with especial inward activity of the spirit; for example, loving, hating, praising."

"Objects whose action is upon themselves; for example, washing one's self, combing one's own hair, cutting one's self, dressing one's self, enjoying one's self, respecting one's self," etc.

"Which of the activities named are proper to man exclusively?"

"What peculiarity have all the activities which are proper to man exclusively?"

"The inkstand stands.
"The mirror hangs.
"The pen lies."

"By what are all these objects known to be in space? and by what were the objects considered to be so?"

"By what they do, by their effect."

"The inkstand stands before you. Does it make an impression on your senses in any other way than by some kind of expression of its activity, its effect?"

"Yes: it is round; it is leaden."

"The pen lies before you. Does it make any other impression on you than by an expression of its activity?"

"Yes: it is long; it is black."

"Seek out objects which you notice, as you did the inkstand and the pen, on account of similar impressions, and mention the impressions."

"The lead-pencil is long.
"The slate-pencil is short.
"The chair is brown.
"The stove is large.
"The flower-pot is small.
"The slate is thick.
"The rule is wooden.
"The table is round."

"The table is round. Seek out other objects that are round."

"The inkstand is round; the ball is round; the pencil is round; the target is round; the hole is round."

(Repeated in a twofold way, singly and in groups, as always.)

"Are the pencil, the target, and the ball round in the same way?"

"Seek out objects which are circular."

"Which are spherical."

"Which are cylindrical."

"Which are round like an egg."

"Which are a long round in shape (oval)."

"Which are oblong and straight-lined."

"Which are three-cornered, four-cornered, many-cornered, hollow, pointed, beautiful, ugly."

"How can all the just-mentioned impressions of objects be comprehensively denoted?"

"As impressions of form and figure."

In the same way deal with wide, narrow; thick, thin; long, short; high, low; small, large, etc., as impressions of size.

So with single, double, treble, etc., as impressions of number.

Then flat, smooth, rough, uneven, humped, scaly, granulous, sandy, splintering, as impressions of surface.

So with wooden, stone, silver, hempen, flaxen, golden, etc., as impressions of the material.

Then hard, soft, brittle; solid, fluid, gaseous; flexible, impressible, etc., as impressions of condition, of consistency.

Then red, green, yellow, blue; violet, orange; colored, variegated; white, black, gray, spotted; glittering, shimmering, etc., as impressions of light and color.

So with foul, muddy, spicy, as impressions of evaporation.

Etc., etc.

So with pure, wicked, decent, moral; merry, surly, joyous; enduring, economical, attentive; docile, communicative, patient; affectionate, childlike, friendly; roguish, courageous, sportive, etc., as impressions of behavior, of disposition, and of bias.

The consideration of the outer world has already shown with precision the germs to be developed for the entrance and introduction of natural philosophy and chemistry as independent studies. The grammatical exercises, as proceeding from the consideration of the outer world, and especially of Nature, come back to it by the perception of the activities and effects, the expressions and impressions, of objects, and the correct and comprehending designation of them by speech, so much the more precisely and indubitably as the seeking-out and taking-in of the limitations and causes of the activities and impressions proceeding from the effects of the powers and material of things, and referring to their nature, are exhaustively treated, and correspondingly designated by speech. The natural, philosophical, and chemical side of the consideration of Nature, which is so important for each human being, finds later in the scholar a much greater and more impressive sympathy, and is much more deeply rooted in him, if this instruction is exhaustively carried out. Therefore, on account of the much too slight observation and cultivation of these sides of the consideration of the outward world and of language in common life, they must be especially considered in the course of instruction, as a

preparation for natural science, natural philosophy and chemistry; or else the future instruction in these branches of human knowledge floats in the air, or is at least not a living sprout of the tree of knowledge, as is so frequently the case with the relation to man of several subjects of knowledge, especially in natural science. And how certainly many whose eyes and senses were not awakened to them in boyhood, and who, notwithstanding, employed themselves later with these natural sciences, could demonstrate this fact in their own experience if they would confess the truth! On account of the importance of what has been here indicated — since the boy is by this means not only placed in the centre of his outside environment, while he recognizes the objects themselves in the most manifold references to each other and to man, and thereby finds that not only himself, but his inner cultivation of mind, word, and conception, come into harmony with the world of Nature, — this subject of instruction is carried out into such minute details. The knowledge of number, form, and size, the knowledge of space in its totality, also sprouts from this; and the germinating points are clearly shown in what has been previously said. For the knowledge of number, form, and size, if it is later to exert an active, fruitful influence on life as a general knowledge of space, must necessarily exert a reflex influence upon it, — must proceed from the observation and consideration of the phenomena of space, and the relations of the actual surroundings.

We go on in the course of teaching.

"You said before: the tree is leafy;
the bush is thorny;
the glass is cracked;
the cloth is perforated;

can you mark this impression of the tree, bush, glass, cloth, by any other language?"

"The tree has leaves;
"the bush has thorns;
"the glass has cracks."

"Seek out other objects with which similar things take place."

"Man has hands;
"the hands have fingers;
"the fingers have joints;
"the finger-tips have nails;

"the fish have scales;
"the goose has feathers;
"the hedgehog has spines;
"the tree has leaves."

"Seek out all the objects which have skin, all which have scales, which have feathers, which have spines, which have leaves," etc.

"The tree has leaves;
"the book has leaves;
"the flower has leaves;" etc.
Etc.

Now to look at and comprehend the objects with reference to the space which each fills.

"The tree has leaves; where has it leaves?"
"On the branches, on the twigs."
"The flowers have leaves; where have they leaves?"
"On the calyx, in the calyx, with the calyx."
"Seek out objects which are on one another."
"The ears are on the head," etc.
"Seek out objects which rest upon another."
"The blackboard hangs on the wall."

In the same way the objects are considered and pointed out in regard to the other references of space-filling, and, first of all, in resting activity; for example:—

The book stands in the bookcase;
the music lies upon the piano;
the bird flies over the house;
the cat creeps under the table;
the ball sticks fast between the bushes;
the scholar sits near the teacher.
Etc.

As many perceptions as possible are to be sought out for all these by the scholars.

Now objects are sought out which in space-filling, continuously-advancing activity are incumbent upon one another; for example:

The boy looks at the slate;
the teacher comes into the school;
the bird flies on the twig;
the sparrow creeps under the roof;
the girl walks beside the mother.
Etc.

Finally comparing the two: —

The coat hangs on the wall;
the coat is hung on the wall;
the book lies in the bookcase;
the book is laid in the bookcase.

As hitherto the objects were recognized and perceived in definite relations of space to one another, so now come perception, comprehension, and designation of these objects in indefinite, general relations of space, as above, below, inside, outside, etc.

Further indications for the course of instruction on this subject cannot be given here, as the space destined for it is already exceeded. It should be added that this course of instruction, according to a law contained in itself, comprises all the relations and references to be indicated by language, advancing from the simple to the compound, and, lastly, it concludes with a comprehensive, descriptive, narrative, etc., representation of actual phenomena of the outer world.

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f.

EXERCISE IN AND FOR OUTWARD CORPOREAL REPRESENTATIONS IN SPACE, ADVANCING ACCORDING TO RULE AND LAW FROM THE SIMPLE TO THE COMPOUND.

Section 94.

Man not only develops and cultivates himself toward the attainment of his destination and his calling by that which he receives from without, even in boyhood, but as much (and, if it be weighed and measured, predominantly more) by that which he unfolds and represents from himself.

Experience and history also teach that the men who have most truly and impressively promoted genuine human welfare have done so far more by what they have represented from themselves than by what they have received into themselves. For as every one knows that we, by genuine and true teaching, advance in knowledge and insight, so also every one knows, and even Nature teaches each, that the use of power not only arouses, but heightens and increases, the power; and so the receiving and grasping the thing in life and action is far more unfolding, improving, and strengthening than the mere reception of it in word and idea. So, also, is the forming with and by means of matter

in life and action (connected with thought and word), of far greater value for the development and improvement of man than the representation by idea and word without formation. So this subject of instruction necessarily follows the just-treated subjects of the contemplation of the outside world and the language-exercises.

The life and impulses of the boy have actually but one aim, that of outwardly representing his personality; indeed, his life actually consists only in an outward representation of his inner nature, his power, especially with material and by means of material.

In that which the boy forms, he sees not outward forms which will penetrate into him, but he sees in them the laws and activities of his spirit, which thus express themselves to him: for the destination of teaching and instructing is more and more to bring out *from* man than to put *into* him, because that which can be put *into* man we already know, and it is already an attribute of humanity; and because, *also*, it is necessary for each one, just because he is a human being, to unfold and develop according to the laws of humanity: but what comes *out* of humanity, what the nature of humanity will yet develop, *that* we do not yet know, *that* is not yet an attribute of the human race; and, notwithstanding, the human nature, like the spirit of God, is constantly unfolding from itself.

Enlightening as this view of the subject might and should be to us from the consideration of our own lives and those of others, if we are only upright toward ourselves, and clear in perception and comprehension of the causes of that which is, yet we, even the best among us, are already so plastered over with outwardly-received prejudices and opinions (like the plants by the spring stoned round with limestone), that only with the greatest exertion and self-constraint do we give a hearing to this better view, and even then only in very slight measure. For let us at least confess, that, when we speak of the development and cultivation of our children, we actually should speak of the swathing and binding of them; indeed, we should not at all speak of a training which coheres with development of the spiritual, of the desire and will in man, but of a stamping and moulding, however proudly we all believe ourselves long since freed from this spirit-deadening view. And exceedingly anxious, therefore, must be those to whom we yield our children, our sons, for education, since we ourselves are thoroughly unable to educate them.

What shall these educators do?

Jesus, whom we all recognize as our greatest exemplar, from a con-

viction which is wholly one with our innermost being, says, "Suffer the children to come unto me, and forbid them not; for of such is the kingdom of heaven." And is not this as much as to say, "Do not forbid them, for there works at least in them unbrokenly the life given them by their heavenly Father, and a free unfolding of this life is as yet not grudged to them?" And do we not recognize in this, as in all the expressions of Jesus, the voice of God? Now to whom shall the educators listen, — to God, or to us men?

And could they do so, whom should they cheat, — God, or men? God they could not cheat, and men they ought not to cheat; therefore they should obey God more than us men, and should state that they will and should obey God more than men; therefore they should rather give no education at all than a wrong and distorted one. For God, not prejudiced men, gave to genuine educators their vocation; for only in the all-sided development of man and of his spiritual power in accordance with the laws of Nature and reason lies the welfare of man and of humanity; and every other course of development of the human race exerts an obstructive influence on the development of humanity.

Our domestic and family education is most superficial and incoherent just in reference to all-sided development of ourselves in outward, visible works, by outward creating and doing, in accordance with the laws of reason and of Nature; therefore our family education above all requires schooling, that is, a starting-point, and a progress conforming to the laws of nature and reason.

The outward representation of the spiritual in man, in and by means of material, must now begin by his spiritualizing that which is corporeal and in space; by his giving to it life and spiritual reference and significance.

This course of development also expresses itself in that of the human race. The corporeal in space, with which the developing and forming representation of the spiritual in man is to be connected, must necessarily in outward form already bear within itself, and express, the law and conditions of inner development; this is the rectangular, the cubical, the beam-shaped, and brick-shaped.

The formations which this material conditions are either outwardly piling (building) or inwardly developing (forming).

The building, or piling-up, is with the child, as with the development of the human race, and as with the fixed forms in Nature, the first.

The importance of the vertical, horizontal, and rectangular, is the first experience of the boy who represents himself outwardly by solids; equilibrium and symmetry follow; so he rises from the simplest wall, without and with connection, to the more compound works, and even to the discovery of every architectural form which is possible with the material given to him. The tabular and wainscot-like building, which is actually only placing the blocks by one another, and side by side, in a plane, has far less charm for the boys than placing them on and over one another, — a clear proof of the all-sided striving of the human spirit already expressing itself in the boy, and making itself known in his activities.

The linear grouping seems to come in later. So, therefore, the course of development and formation of man is one which makes finer and finer the corporeality, and spiritualizes it; in the place of actual connections of sticks comes in the drawing; in the place of the superficies, the painting, the color; in the place of the corporeal piling-up of cubes, the corporeal developing from cubical fundamental forms, that is, the actual moulding and forming.

Without considering this general course of training of man, which easily catches the eye, which continues to actively develop, which constantly advances from the outward and corporeal to the inward and spiritual, and which is always pointed out by God and Nature, we can nevertheless question of what use will these exercises be to my children.

And, nevertheless, we should not have reached the standpoint of total cultivation at which we now find ourselves, if a quietly-overruling Providence had not led us just this way, either without our knowledge, or by our own perseverance in all the efforts and strivings of man.

And man is indeed to repeat the works of humanity, at least in himself, that they may not be to him empty and dead, that his opinion concerning them may not be outward and spiritless; just as he is to traverse within himself the paths of humanity that he may learn to understand them and himself. And yet we say of the activity which is here being conferred upon the boy, which is determined by spirit and law for a conscious aim, — This my son does not need.

Perhaps not; it may be; it may not be. I do not know; but this I know, that your son needs power of action, activity, judgment, endurance, reflection, etc. And all this he learns, and far more he gains; for inactivity, ennui, want of knowledge of what one is to do,

or at the best, stupefaction, are the most fearful of all the banes of childhood and boyhood; but the opposite qualities are a universal means of spiritual and bodily health, of all domestic and civil welfare.

The course of teaching determines itself, as it does everywhere, when the true starting-point is found and impressed on the subject of instruction, and the purpose is comprehended.

The best material for building representations is, at the beginning, a number of wooden blocks whose front surface is always one square inch, and whose length increases by inches from one to twelve.

If, now, twelve pieces of each length are taken, two kinds of lengths, — one and eleven, or two and ten, etc., — form a tablet of one square foot in surface, and one inch in thickness, so that all the blocks taken together with some larger pieces amount to a layer of more than half a cubic foot. It is best to keep them in a box whose inner space is exactly the just-named size.

In the instruction such a building-box is used in various ways, which develop at the same time with the development of the boy.

The next material is, — blocks in reduced relation to the building-bricks, so that eight pieces make up a cubic foot on a smaller scale, therefore in the proportion of two inches to an actual foot in length. As, with the building-blocks before defined, there were an equal number of each kind and length, so here, on the contrary, there are a great preponderance of the brick-like blocks, at least five hundred pieces; the others from two to six fold length being always proportionately smaller; so also of one-half fold length. In like manner the blocks are also distinguished as one, two, three, etc., lengths.

The first requisition now is, that the boys learn to distinguish, name, and group the building-material according to its size; and during the building it is always kept apart, and arranged according to size. The second is, that what has been done is to be each time connected with exactly defining words spoken aloud: for example, I have an alternately-connected (each brick covering the joining of the two below) vertical wall with perpendicular ends, one door-opening, and two symmetrically-divided window-openings.

From one wall the advance is to a simple, rectangular, many-sided building with only one door; then it increases in size and in the number of the doors and windows; lastly with division-walls and room-like parts from a one-storied to a two-storied building, etc.

The wainscot-like buildings are similar, yet in many respects more manifold.

The linear formations of sticks from at least one inch to five inches in length allows a yet greater diversity of application for writing, for drawing, for building.

The forms made from paper and cardboard have each their peculiar sphere of formation and course of progress.

Still more forming and developing (but also only for those already provided with a certain degree of mental power) is the moulding from plastic, soft masses according to the laws given by the cubical form; but this, as well as the free modelling from the same material, belongs more to the following later stage of boyhood.

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g.

DRAWING IN NET ACCORDING TO OUTWARD NECESSARY LAWS.

Section 95.

The vertical and breast-line of man, the vertical and horizontal (though we are so little conscious of it, and still less take it into account) form the connecting link for the perception and comprehension of each form.

When we comprehend forms, we refer all to these lines, and in thought, though still unconsciously, draw these directions outside of ourselves, especially in the visual plane; our power of seeing and thinking also repeats this act; and, when this is done, there results a network which enters into our consciousness, the more strictly and sharply we give an account to ourselves of the forms of what we view.

But because, now, the inner spiritual efficiency makes itself known in many ways in the form, and in that which is conditioned by it; and because the recognition of this inner spiritual efficiency belongs to the destination of man, since he by means of it recognizes himself, his relation to his surrounding, and thus the essence and being as such — so also the development not only belongs to the comprehension, but is also essential to the education, of man, especially for the representation of form; is an essential part of the education of man, of instruction; and (since the attainment to consciousness of the form rises with the attainment to consciousness of the rectangular references) the outward representation of the rectangular is, for the

human being to be educated, a means of development to the comprehension and representation of forms and figures, grounded in the nature of man and of the subject of instruction.

If, now, the vertical and horizontal are repeated in equal proportion in both directions, the result is a network formed merely of squares of equal size. But, by the square as a connecting form, the representation in the visual plane, as well as especially the enlarged and diminished representation, is most easily possible; a fact which, if it were needed, would yet more justify the use of the square.

The use of the triangle as a means of perception and representation proceeds from the square and rectangle, as is shown by the further course of the instruction.

With the use of the square the degree of inclination is determined by measurable relation, the sides of the square forming, as it were, the supports to the oblique line; but with the use of the triangle the degree of the inclination is directly determined by the measurable relation to the right inclination.

As both find their application, both should be used in the instruction; but the latter should be used later, as a higher stage of the development of power.

The second necessary requisition of this instruction is the easy representation and equally easy destruction of the comprehended and represented form. This requisition is best met by the slate and slate-pencil. Therefore a slate with a grooved net formed of equal squares is the first requirement of this instruction.

But, as the progress of the instruction shows, the size of the squares, or the distance between the parallel lines, is by no means indifferent. For, if the distances are too small, all the representations determined by them will be too insignificant: if the distances are too large, the representations will be too extended for the power of survey of the scholar at this age. The best distance is that of a quarter of an inch.

The first occupation of this instruction is to exercise the scholar on this squared slate for the accurate representation and comprehension of the most essential fundamental relations of form, and the relations of size which they condition.

The course of teaching is connected with the former perceptions of solids gained in building; for there the boy learned to know one-fold, two-fold, three-fold, etc., lengths by the instruction for corporeal representations in space, of which we have just treated.

Thus, then, this instruction, as its application will especially show, is connected with what has been already stated, that there shall be no gap in the instruction, that nowhere in the instruction shall any thing stand detached and isolated, but that all, like life itself, shall be a living, coherent whole united by cause and effect.

The course of instruction is as follows:

The teacher draws, in a grooved side of one of the net-squares, a vertical line of the whole length of the side, and says, while drawing it, "I draw a vertical line."

After he has drawn the line, he says to the scholar, "What have I done?"

The scholar gives in answer the words before spoken by the teacher, "Drawn a vertical line."

"Now draw in the same manner, along the slate, vertical lines of a single length."

If this is done, and the lines are drawn to the satisfaction of the teacher, he says to the scholar, "What have you done?"

"I have drawn several vertical lines," answers the scholar.

If several scholars begin this instruction at the same time (which is advisable), after the work of each has been examined, the scholars answer collectively to the question asked of all, "What have you done?" "We have drawn," etc.

On account of their many-sided and declared utility, it is a standing direction that these questions and answers should be employed with this subject of instruction also; for man must bring that which is represented to word and thought, and the thought and word to representation; as he becomes man through this mode of action essentially.

Continuing the instruction, the teacher now draws a vertical line of the length of two squares, and says, "I draw a vertical line," and asks again, "What have I done?"

"Drawn a vertical line."

"Is this vertical line like the others?"

"No: it is twice as long as the other lines."

"What can we call this vertical line in comparison with the former lines, in respect to length? What must we name them in order to distinguish them?"

"Vertical lines of two-fold length."

"Now what must we call the vertical lines you drew before, in respect to length, compared with the line I have just drawn?"

"Vertical lines of one length."

"Draw a row of vertical lines of two-fold length."

After it is done, the teacher says, as before, "What have you done?"

And the scholars answer, "We have," etc.

In the same way the teacher draws lines of three, four, and five fold length; and the scholars do as he has done, and point it out by words.

The scholars, by drawing the lines themselves on the net-lines, greatly develop and strengthen their skill of hand, and power of comprehension and representation, and make clear their increasing power.

As comparison with what is unlike is more important for the comprehension and retention of each thing than with that which is like, all the vertical lines hitherto drawn are to be placed side by side in their different lengths. The teacher does this while saying, "I draw a vertical line of single length, of two-fold, three-fold, four-fold, and five-fold lengths. What have I done?"

The scholars answer, as usual.

The teacher makes the five vertical lines again while he says, comprising them all in one clause, "I draw vertical lines of from one to five fold lengths side by side."

Question and answer, as usual.

"Now draw vertical lines of from one to five fold lengths." "Have you done it?" "What have you done?"

The instruction only goes up to a five-fold variety, because, in the numbers up to five, all later numerical relations are already given, at least announced; they are in fact already announced in the first three numbers, as these numbers include even and odd, prime, square, and cubical numbers; yet these relations are almost all repeated in the series of numbers up to five, and become thus sufficiently clear for this representing purpose; since the six is only a two-fold three, and a three-fold two; but the seven is, in this respect, equivalent to the five; therefore this and all the following similar representing exercises only go up to five.

With this placing of the lines side by side for the purpose of comparison, the teacher can employ also several little differences in the manner of representation to meet the need of the scholar, if the latter is still weak in comprehension and representation. The five lines

may increase in length downward, so that their upper ends touch one horizontal line; or they can increase upward, so that the lower ends touch one horizontal line; or the lines which have here been drawn increasing may now be drawn, in both cases, decreasing; that is, of from five-fold to one-fold length. These alterations are in the beginning very useful (especially when one thing is to be practised under several forms) in order not to weary the scholars; however, their use is justly left to the examining teacher.

The course with the vertical lines is now repeated with the horizontal lines.

Hitherto the lines were not combined, and only lines of like kind — vertical with vertical, and horizontal with horizontal lines — were compared with respect to position. The more important step now following is to represent vertical lines in comparison with horizontal, and *vice versa*. In order to make this comparison most perceptible and impressive, the two kinds of lines must be combined with one another in a point.

The teacher draws, and says, "I combine in one point a vertical and a horizontal line, both of which are of equal length, and each of one-fold length. What have I done?"

"Do the same."

"What have you done?"

"Do the same on one of the long rows of your slate."

The teacher continues speaking, drawing at the same time, "I combine in one point a vertical and a horizontal line of equal length, each line being of two-fold length."

In the same way each line is to be of three-fold, then four-fold, and lastly five-fold length.

The scholars do the same, and each time point out by words what they have done.

Here also the comparison must again take place; therefore the teacher draws, and says, "I combine in one point each time a vertical and a horizontal line, both of which are of equal length, and each line of one-fold, two-fold, three-fold, four-fold, and five-fold length, and draw them one within another."

The scholars say and do the same, as usual.

The comparison of the lines drawn one within another, as was before the case with the comparison of the vertical and horizontal lines of different lengths, can also take place in four different directions; namely thus, ⌟, thus ⌞, thus ⌝, and thus ⌜; but the two

connected lines of five-fold length afford the clearest comparison, on account of the enclosing, as the following shows.

In this latter drawing, vertical and horizontal lines of equal length were compared with one another; vertical and horizontal lines of different lengths must now be compared with one another in the same way.

First where the *horizontal* line is *twice* as long as the vertical.

The teacher draws, and says, "I combine in one point a vertical and a horizontal line, the *horizontal* line twice as long as the vertical, the vertical line of one-fold length; therefore the horizontal of?" — "Two times one-fold length."

[On account of the continued development of the instruction, it is not advisable to say "of two-fold," instead of saying, "of two times one-fold length."]

The result is ⌊___.

The scholars repeat, and draw the same as the teacher, and denote by words what they have represented, as usual.

Now, vertical and horizontal lines are combined, the horizontal being always twice as long as the vertical, but the *vertical* of *two*-fold, the horizontal, therefore, of two times *two*-fold length; or the *vertical* of *three*-fold, therefore the horizontal of two times *three*-fold; or the *vertical* of *four*-fold, therefore the horizontal of two times *four*-fold; or, lastly, the *vertical* of *five*-fold, therefore the horizontal of two times *five*-fold length. Finally, all single representations are again drawn one within another, for comparison, as before.

Secondly, the *horizontal* line *three* times as long as the vertical.

As in the preceding forms the horizontal line was always drawn *twice* as long as the vertical, so now the horizontal line is drawn *three* times as long as the vertical; therefore, if the vertical line is of *one*-fold length, the horizontal is of *three* times *one*-fold; if the vertical line is of two-fold length, the horizontal is of *three* times *two*-fold, etc.; the horizontal line determined by the vertical being of *three* times *three*-fold, *three* times *four*-fold, and *three* times *five*-fold length. Lastly,

all the products are again drawn one within another, and, for the purpose of comparison, the vertical lines are here always *three* squares apart, as with the two-fold length of the horizontal lines they are *two* squares, and with four and five fold length of the horizontal lines always *four* and *five* squares apart, as the following exercises require. As has been already said, the horizontal lines, in comparison with the vertical, do not go beyond the *five*-fold length.

That greater skill, especially in grasping the relations, may be attained, these exercises may be carried on in such a way that, as in the preceding exercises the horizontal line was compared with the vertical, the vertical is now compared with the horizontal. Here the horizontal line is drawn first, and then the vertical, and the expression in words is suited to this reverse manner of origination, the vertical line being here considered as a *part* of the horizontal, as the horizontal was before considered as a *multiple* of the vertical. This difference is important, by no means on account of the number, which here lies wholly beyond consideration, but merely on account of the *manner of origination*, which is essential with pictorial representations.

In the preceding exercises the horizontal line is always a multiple of the vertical, or, in other words, it is longer than the vertical; but now the vertical line must be drawn longer than the horizontal; that is, the horizontal line must be represented as a part of the vertical.

The teacher draws, and says, "I combine in one point a vertical and a horizontal line; the horizontal line being one-*half* as long as the vertical, the vertical line of *two* times one-fold length, therefore the horizontal of?" — "One-fold length."

The result is .

Now the vertical line of twice two-fold, therefore the horizontal line of *two*-fold length; the vertical line of twice three-fold, therefore the horizontal line of *three*-fold length; the vertical line of twice four-fold, therefore the horizontal line of *four*-fold length; the vertical line of twice five-fold, therefore the horizontal line of *five*-fold length.

As in the preceding exercises the horizontal line was always drawn one-half the length of the vertical, so now it is drawn one-third the length of the vertical, when the vertical line is of three times one, three times two, three times three, four, and five fold length.

The same course is pursued when the horizontal line is drawn one-fourth and one-fifth of the vertical.

If it is desired that the scholar, when drawing, view the vertical

line rather as a *multiple* of the horizontal, the origination of the product is reversed, the horizontal line becoming the measure of the vertical.

These reversals are at times important for the development of the hand and eye.

These exercises have a multifarious effect upon the pupil; namely,

perception and comprehension of the form;

development of the eye and hand for representation; and

development and confirmation by this representation of one and the same product in different ways; complete unity and readiness of eye and hand in the comprehension and representation of each form.

The products of the activity of the scholars at this stage of instruction have been right angles, the sides of which were either equal, and each from one to five fold length; or the sides were unequal, and either the horizontal was one, two, three, four, or five times the length of the vertical, which was at each time of from one to five fold length; or the vertical side was from two to five times as long as the horizontal, which was each time of from one to five fold length.

These products, combined with one another in opposite positions, and enclosing space, give rectangles, and, first of all, squares, to the representation and drawing of which the instruction now advances.

The teacher draws, and says, "I draw a *square*, each side of one-fold length."

The scholars repeat, represent, and denote by word, as usual.

Now the representation goes, from drawing squares each side of which is of two-fold length, up to squares the sides of which are each of five-fold length. Lastly, comparing representation, and drawing of them one within another.

Now comes drawing and representation of *oblongs*, which are at first *twice as long as wide*, the width of from one to five fold length; therefore the length of two times one, two, three, four, and five fold length.

Next, oblongs three, four, and five times as long as they are wide; the width in each case being again of from one to five fold length.

The high quadrangles are carried through in the same way that the long quadrangles have been.

Now comes comparing connection of the long and of the high quadrangles in each relation of size.

This connection can be extended or contracted according to the scholar's stage of development, as is also the case with all the earlier and later exercises.

The exercises hitherto have had in view principally, the training of the eye; those now following have in view the training of both eye and hand; and the later exercises, of the hand alone.

The series of exercises now following represent the sequence of squares and rectangles just demonstrated; and here again the long and high quadrangles, but, at the same time, with the diagonals drawn within, and either to the right or left, or to both.

The object of the exercise is that the scholar may precisely comprehend and definitely represent the inclination of each line.

This precise comprehension and definite representation of the length and inclination of the lines, as they either actually are, or as they appear on the visual plane (in which, indeed, lies the greatest outward power of satisfactory pictorial representations), we now attempt to develop still more by the following exercises.

If the previous exercises have been carried through with all the squares and rectangles (long and high quadrangles), they will also be again grouped for comparison, so that one corner of all the rectangles to be compared coincides in a single point, and two sides of the rectangles always coincide; from the common end-point of all the rectangles the comparing diagonals are now drawn. From the drawing, and the comparing view of these diagonals, compared with each other and with the rectangles in which they were drawn, now proceed the general perceptions:

that the oblique lines collectively (except one) approach more nearly either the horizontal or the vertical;

that the oblique lines approach *the more nearly* to one of the right lines, *the more often* the one short side of the rectangle is contained in the other; or that the oblique lines are *the less oblique*, *the smaller* the one side of the rectangle is in comparison with the other;

therefore that the obliquity of the lines depends upon the relations of the two right lines which are, as it were, the supports of the oblique; the smaller right line, or support of the oblique, is, in the present case, either one-half, or one-third, or one-fourth, or one-fifth of the larger right line or support.

The inclination or obliquity of the oblique lines is now defined by these recognized relations as half-oblique, third-oblique, fourth-oblique and fifth-oblique lines.

The oblique lines which more nearly approach the horizontal line may be still further distinguished as *lying;* and those which more nearly approach the vertical, as *standing* lines.

The middle lines between the two right lines which incline toward neither, or whose supports are equal, are called *whole oblique* lines.

As the clear and quick comprehension and ready representation of the relations of length and breadth of the rectangles was so indispensably necessary to the comprehension of these inclinations of the lines, so, again, the clear and quick comprehension and sure representation of the inclination or slant, and of the length, of the oblique lines, are highly important for the drawing practice.

Therefore the oblique lines are now made without previously-drawn limiting quadrangles, and (which explains itself) each kind of the oblique lines is again drawn as oblique lines of *one-fold* length (when the shorter side of the rectangle is the length of *one* side of the square of the net), as oblique lines of *two-fold* length (when the shorter side of the rectangle is *twice* the length of *one* side of such a square), etc., up to oblique lines of five-fold length (when the shorter side of the measuring rectangle is five times the length of one side of a square of the net).

At the end of this series the oblique lines of from one to five fold length are again drawn side by side for comparison, as was the case in the beginning with the right lines.

The drawing and representation of the *whole oblique* lines begins the series of these exercises. Therefore the teacher draws, and says,—

"I draw a whole oblique line of one-fold length."

"What have I done?"

"Do the same."

"Denote it by words."

"Proceed in the same manner with whole oblique lines of from two to five fold lengths."

Now whole oblique lines of from one to five fold lengths are drawn side by side, and either right-slanting (that is, drawn toward the right side) or left-slanting (drawn toward the left side), and, in both cases, either from or toward the one who is drawing. The attention can even now be directed to the different origination of one and the same oblique line (first of all whether it is drawn toward or from the one who is drawing), and the exercise of such drawing can, even here, be taken up, foreshadowing its later introduction in its whole consideration and execution.

The *half-oblique*, the *third*, *fourth*, and *fifth oblique*, the *lying* as well as the *standing* lines, are carried through in the same way.

As before, oblique lines of like position and inclination were com-

pared with one another in respect to size and length, so, now, oblique lines of *different* inclinations are compared, at first only *lying;* and here again, first of all, they are all of one-fold, then all of two, three, four, and five fold length; then *standing,* and here also beginning with one-fold, and advancing to five-fold length.

Now standing and lying oblique lines are compared with one another, with the right lines, and the whole oblique lines, at the same time; and here, again, first on one, then on two, and at last on four sides, each line being lastly of five-fold length.

The result is at last oblique lines in all the degrees of obliquity and inclination hitherto used; each line of five-fold length; and all running out from the middle, like rays.

As here all the oblique lines are drawn radiating *from a middle,* they must also, to exhaust the whole, be drawn running *toward* one another around a middle.

By the totality of what has been hitherto given, the scholar is now enabled to draw readily, in the net, each right and oblique line of each inclination and in each position used, running to and from each other; and consequently the preliminary exercises in which the scholar drew lines according to precise outward law, and thus developed in himself the comprehension and representation of the lines in active union, are ended.

The last results (the radiating and encircling), which are distinguished from each of the former ones by grouping and representing in themselves all the former exercises, also point out the end of these. This concluding grouping of representation comes before the eyes of the scholars, and the teacher connects his questions with it.

"Do these representations which you have drawn make any other impression on you than the former ones?"

"Yes."

"In what does this impression consist?"

All the scholars will in their answers, in whatever way, always return to and concur in the statement, that in both representations all the lines refer *to* and *from a middle* on all sides, and that this uniting middle unites lines *opposite* to each other, *yet like in inclination;* of *different* lengths, yet the *opposite of the same length;* that therefore these lines represent a whole, concluded in itself.

The teacher gives the name "*figure*" to this whole.

Some of the scholars also will immediately say that the lines last drawn *from and toward* a middle, or *around* a middle, in contrast to the earlier ones, represent a *figure.*

The teacher now develops with the scholars the properties and nature of a whole, a figure, as that which is composed of parts (here lines) which are relatively opposite to, yet like, one another, proceeding from a visible middle (as with the radiate form), or from an invisible middle (as with the encircling form), and combined to a unity, therefore necessarily symmetrically combined.

This conception of a whole (here of the figure) is multifariously viewed in, and demonstrated by, the two last products, and should be frequently discussed, that complete clearness of mind and word may be attained.

From this point there now comes in a quite new stage of instruction in drawing, which at the same time points out a new stage of the development of the scholar; that of the spontaneous representation of line-wholes from each individual kind of lines before practised, or from several connected, limited by the determination of the net, — the *invention of figures.*

Each spontaneous representation of the inner in and by the outer, which is done in accordance with limitations outwardly given indeed, but, as the scholar easily recognizes, necessarily proceeding from the inner, is called *invention.*

The production of the course of teaching for the invention of figures is reserved for the representation of the next stage of scholarship; and, in general, the representation of the many-sided, developing, comprehensive nature of this course of instruction, must be deferred to the end of the demonstration of the whole instruction in drawing, in order not to interfere with the true culture of man.

He alone who has not only applied it to and with others, but also especially to himself, can truly judge of the effect and character of this course of instruction, as is in general the case with all instruction which, with insight, aims at the awakening of powers and life, and at dexterity and certainty of representation.

These indications will suffice for this self-appropriation of this course of instruction, at least in what is most essential for self-development and the development of others, especially for him who follows it from stage to stage, doing and representing it himself, and so finds in himself its silently-ruling, simple law.

The employment of this instruction would fill one of the greatest gaps in our country and city schools, and should therefore be lacking in none, which fact clearly shows itself to every investigating and clear-sighted person, since this instruction makes a demand upon the senses,

and through these upon the thinking power, and so makes the scholar intellectually, and, by his manual dexterity, outwardly, corporeally, and uniformly active, and thus removes the extremely harmful *ennui* and idleness, and the injury thereby resulting, from the scholar on whom the teacher cannot at the moment bestow his attention. This is essential for the school, but, besides this, the method of instruction gives as a dowry for life the development of the eye for the recognition of form and symmetry, and the training of the hand for the representation of these; and where is there a relation and efficiency of man in life which does not demand the employment thereof as essential?

Also the great injury of the lack of development for comprehension and representation of form and symmetry in our citizens, especially our mechanics, as well as in the countrymen, has been already impressively mentioned.

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h.

COMPREHENSION OF COLORS IN THEIR DIFFERENCE AND SIMILARITY; ESPECIALLY BY REPRESENTING THEM ON ALREADY FORMED SURFACES WITH PREDOMINATING ATTENTION TO ALREADY MADE FORMS; PAINTING OF PICTURES IN OUTLINES; LATER WITH PREDOMINATING ATTENTION TO COLORS; PAINTING IN NET.

Section 96.

Every one to whom the life of the boy is not wholly unfamiliar, in whatever station he may be, will confess that the child, and especially the boy, at the beginning, needs to have a clear idea of color and the relations of color, to become conscious of and discern them, and, for this end, to employ himself with coloring materials, with colors. He will grant that the life and creation with colors belongs in and to early boyhood, though in different degrees with different individuals.

Can it be otherwise?

The general cause of all activity in the child requires him first of all, in every possible individuality and form, to develop his powers, qualities, and capacities; that is, the totality of the life he feels in himself, and to exercise and to use each of these.

But here comes in the second more necessary principle for the inner spiritual development in itself, without being able to point out any definite direction of it: are not all colors more or less determined by the influence of the everywhere extended activity of light?

Therefore color and light are in most intimate connection.

And are not color and light again in most intimate connection with the activity, elevation, and change of life?

Therefore do not life and light, though it be at the first only earthly light, point toward the heavenly, in which alone it has its existence? etc.

This high significance of color, remarked or anticipated by the boy (as well as the form in Nature from another side of the consideration), as it were, as an embodiment of the earthly light, the light of the sun, as a visible demonstration of its nature; this anticipation now of penetrating thus by the colors (by the penetrating into and appropriating the nature of the colors) into the nature of the earthly light, of the sunlight, may, though unconsciously to the boy himself, be the most real innermost spring of his liking to employ himself with colors; this may be strictly said to be boyish experience.

We say indeed, "Colors are *gay;* it is their *gayety* that attracts the children, and gives them pleasure."

Good; but then what is *gayety?*

Is it not the effect of a cause (the light) in different appearances (colors)?

Is it not the effect of an essence (light) in different forms (colors)?

It is positively not the gayety as an outward appearance which attracts the boys, and gives them pleasure, else the gayety as an outward appearance would satisfy the boy when he possesses it. But it does not do this, neither is this done by the quantity, the mass; but the expression, the finding of the inner coherence, the power to spiritualize it, does satisfy him.

If it were the quantity that satisfied the boy, he would feel quieted when surrounded by it, and we should not so often hear it said to the dissatisfied boy, "Do tell me what you want; you have that and that and that, and are you not yet contented?"

The boy, even in childhood, seeks unity, expression, and coherence of life; he seeks life in general.

The child is charmed by the gayety, because in the manifoldness he recognizes the unity, the inner coherence. Hence he loves the colors in their groupings and unions, because by means of them he comes to the knowledge of one inner unity.

But notwithstanding the high significance of this tendency in the boyhood of man, how do we meet it?

We give the development for the understanding and use of colors in a very casual way.

We do indeed give the boy colors and brush, like so many other things, as one gives food to animals, casually, and also with good intentions; but the boys throw about the colors as they do the other playthings, and as the animals do the food which does not suit them.

What should they do with them (the colors)? They do not themselves know how to put life and union into the colors, and we do not help them to do it.

However separate and different form and color may be, yet they are to the young boy just as unseparated as body and life.

Indeed, the comprehension of colors seems to the boy, as perhaps to mankind in general, to come through the form, and also the form seems to come out by means of the color.

Therefore the understanding of color must at first be connected with the understanding of form; and the comprehension of form with that of color: color and form are in the beginning an undivided unity.

Since, now, color and form appear at first to the boy as an undivided whole, but bring each other to the knowledge and insight of the boy, so, with the efforts to cultivate the sense of color in man by instruction and teaching, by means of perception and of his own representation, there is a threefold subject for consideration:

Firstly, that the forms which the boys are to point out and represent be (what is most satisfactory) simple and definite;

Then, that the colors be as pure and decidedly clear as possible, and correspond (at least approximately) to those of the object, especially of the natural object;

Finally, that the colors should be understood as much as possible in their relations to one another as they are actually shown in Nature, in their opposite conditioned and separating unions, or in their confluent unions.

As the colors themselves must be as definitely comprehended as possible in respect to their impressions, they must also be connected with the word which best defines them:

First the pure colors by themselves, as red, green, blue;

Then according to their intensity, — dark, high, bright, etc.;

Then the single colors in respect to their kinds and mixtures.

Here a double distinction takes place:

First comparison of colors with the objects, as rose-red, sulphur-yellow, sky-blue; thus defining and naming the kinds of color by the objects in connection with which they are most frequently found;

Or by the comparison of the colors with each other, as a blue-red, a green-yellow; or approximately, greenish-yellow, bluish-red.

In general all the definitions of color must at first proceed from such natural objects as these colors are predominantly, and in the greatest unalterability peculiar to: when they are fixed in the mind of the pupil these definitions can also be carried on to the colors of other objects.

The names of colors which are derived from objects must as often as possible be viewed in the object themselves, such as violet-blue.

With the first instruction but few different definitions are investigated; but care is taken that these definitions be clearly retained, and given again with precision.

Likewise, in the use of coloring materials, but few colors are given to the boy at the same time; but these colors should be as decided as possible. The secondary colors are later derived from the principal colors, as far as is practicable, and presented to the scholars.

The surfaces to be colored must at the beginning not be too small, and it is best that they should refer to perceptions of Nature, as, in general, the instruction must be connected with the nearest surrounding objects, and proceed from these, as usual; for instance, leaves, large flowers, butterfly wings, and birds.

The color of quadrupeds and fishes is too indeterminate.

Yet seeking and striving to represent natural objects especially, in their peculiar colors, will make the scholars observe so much the more the natural colors of the natural objects, to which they can be led by their own questions:

"How shall I paint the trunk of this tree, this flower?"

The more independent now the comprehension of color is, and the less it is dependent on the object, the more are the colors represented on their own account; but still in representing forms.

If the color is now viewed as wholly independent, having, as it were, stripped off the form, form retreats in the instruction, and color comes out on its own account.

The form of the representation is again connected with the square net for many reasons which are founded in its use.

The coloring material is most advisably, sap-colors.

The instruction itself is very easily attached to the life of the boy; hundreds of germs show themselves in boy-life; each circle has, and

should have, its peculiar germs; rightly grasped the instruction will flow through them into the life of the children, and life will come into the instruction.

I will write down what I saw and see; the more favorable the relations, the more judicious the beginning; relations cannot be made, but must be utilized.

Almost a dozen boys, of the same age as those for whom this instruction is destined, surround their teacher, as sheep do their shepherd. As the shepherd leads the sheep to fresh pastures, the teacher is to lead the boys to joyous activity; for it is Wednesday afternoon when the usual school-instruction is ended, and to-day there is no call to other activity. It is autumn, and the desire for painting has already been often expressed by the lively boys of this happy circle; for the autumn will perhaps invite the boys mostly to painting, to representations of color, since the colors in nature are in the late autumn in large masses, and various; and each boy has already tried in his own way to fulfil this desire.

"Come, let us paint," says the teacher. "You have already painted, and painted a good deal; but the painting itself, like that which you painted, does not please you long; for it is not clearly and exactly painted. Come, let us see if we can do better together. But what shall we paint that is not too difficult for us, for we wish to learn how to paint; therefore what we paint must be simple and of one color."

Teacher and scholars quickly find that leaves, flowers, and fruit are the easiest things to paint.

Leaves are chosen; for the beautiful, gay, red, yellow, brown, etc., trees, and the beautiful colored leaves which with soft rustling have detached themselves from the branches in the beautiful autumn days and covered the ground around the trees with a gay carpet, have whispered much to the boys, and the boys have gladly brought the leaves home, in bouquets and wreaths.

"Here are leaves in outlines" (the teacher has collected them for this purpose), "look at them; how will you paint them?"

"Green." — "Red." — "Yellow." — "Brown."

"Which leaves would you paint green? which red? which brown?"

"Why would you paint these yellow?"

"Why paint these red?"

The teacher now distributes the colors, which are preferably fine

water-colors, and rubbed on small four-cornered glass tablets; the colors can also be given to the scholars in the beginning, of a suitable degree of fluidity, in little paint-saucers.

The first point is correct perception and designation of color; it need scarcely be mentioned that a scholar cannot as yet give the leaves their exact color, but only that which most closely approximates to it, since the subject in hand is not so much representation of the object, as comprehension of the colors and management of the coloring-matter. Symmetrical laying-on of the colors, keeping within bounds, etc., are the most essential points which are yet to be observed. It is yet to be understood that the scholar should hold his body in a proper position for free motion of the arm, hand, and fingers.

The scholar should not go from one color to another until he has some government of his material, because each coloring-matter requires somewhat peculiar treatment.

The advance from leaves is to flowers. For this purpose, such flowers are chosen as have large one-leaved flower-crowns, as well as flowers with only one color or a few determinate and strictly-bounded colors, such as the bluebell, the yellow primrose, the yellow narcissus, etc.; likewise single flowers are chosen instead of double ones, and the flowers are painted in a full front or a whole side view.

From flowers and objects of only one color, we pass on to those which have two colors, but distinctly separate colors, such as the convolvulus, auricular, vetch, pea-blossom, etc.

The next advance is to objects having three colors.

An effort is here made at least to comprehend the colors as clearly as possible, to represent them as well as possible, and to give them the most precise designation possible by words, although, at this stage of cultivation, each of these attempts will seem still very incomplete.

But what feeling will be here awakened in the scholar! and the desire for accurate designation, and clear insight into at least the outward relation of the colors to one another, will be aroused.

So the colors become less and less dependent on form; they come out more independently, and require more independent observation. Besides, the pupil now wishes to employ himself longer with each color, to rightly appropriate its character and its impression; for he wishes to control it, and feels the insufficiency of his knowledge and use of it hitherto.

Therefore now comes representation of the colors purely, without the essentialness of form, in surface-spaces determined by the net.

The first consideration of these exercises is to put the colors into certain spaces, rising from smaller to larger in constantly continuing or interrupted surfaces, in legitimate degrees of strength, without overrunning the lines. Therefore surface-spaces of at first one, then two, etc., up to five net-squares *constantly continuing* (that is, touching sides), and *interruptedly continuing* (touching corners), are represented in each color. In this way, the scholar obtains a clear knowledge of the peculiarity of each color by itself, and then of the management of each. These exercises begin with pure *red*, pure *blue*, and pure *yellow*.

To them succeed the exercises with the pure secondary colors, — pure *green*, pure *orange*, and pure *violet-blue* (purple).

Why is each series begun with *red* and *green*? — Experience teaches that these two colors come the closest to the boys, and are liked the best for the beginning of the series.

As *one* color only has hitherto been used in constant or interrupted planes, so now, in like manner, two, then three, till finally all six of the colors hitherto used singly, are connected according to the two principal references, so that either the long sides of the five-squared surfaces last originated are at the same time the mutually-touching surfaces of the different colors, or the square sides lying on the cross-line.

The order and sequence of the colors goes from *blue* to *green*, *yellow*, *orange*, *red*, *violet*, as the most suitable, and also as most harmonizing with the colors in Nature.

The last appearances in this stage of development are four color-wholes, similar to the two line-wholes in the line-drawing in net. They proceed collectively, according to law, from the thing itself, and bring to view the sequence of colors, limited by a middle to which they refer, in all the directions given by the net.

These four color-wholes show an essential two-fold difference:

The different, equal, rectangular, colored surfaces are continuous in themselves, and joined to one another by the long sides, therefore in vertical and horizontal directions appearing sharply defined; or

The different color-surfaces are interrupted; the squares of like color only touch at their corners in the direction of the diagonal line of the net, and the different-colored, interrupted surfaces are also joined in the direction of this diagonal.

Each of these two color-wholes, like the line-wholes, has in itself a two-fold difference, the one referring to a visible middle, and also

going out from it; the other referring to and enclosing an invisible middle.

With the representation of these four color-wholes this stage of instruction closes. The independent free invention of color-wholes, according to the laws given by the course of teaching and the thing itself, similar to the invention of figures in the net; the more extended comprehension of the colors in their degrees of strength, or shades; the comprehension and imitation of the forms of Nature, in and by the square forms; — this more extended demonstration of the farther course of instruction for the development of the sense of color, the comprehension and representation of color, belongs to the next stage of boyhood and instruction.

However insignificant the degree, and however small the extent to which the instruction in this subject has developed, yet experience shows that it has already a manifold effect upon the scholar. Like song, it ennobles the sentiments, and the whole nature of man, vivifies the sense of comprehension of colors in Nature, and thus heightens the sense of Nature and of life. The further influence in the other subjects of instruction, as well as in outer life, comes out clearly to him before whose inner sense the requirement of both lies.

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i.

PLAY, THAT IS, FREELY-ACTIVE REPRESENTATION AND EXERCISES OF EVERY KIND.

To what has been already written concerning play belongs the following.

The plays of boys of this age, that is, the freely-active employments of this age, show a three-fold difference; they are either imitations of life and of the phenomena of actual life; or they are the freely-active applications of what has been learned; or they are completely spontaneous, symbols and representations of the spirit of each kind of object by materials of every sort, and, in the latter case, either according to the laws contained in the object of play, and material for play, which laws the boys seek out, to which they subject themselves, and which they follow and obey; or, according to the laws of man himself, the laws of thought and sensation. But in each case the plays

of this age are, or should be, pure manifestations of the strength and courage of life; they are the products of the actively-ruling fulness of life, and pleasure in life in the boy.

The plays at this time therefore presuppose inner life and animation, active vigor of life, and a genuine outward life; where these are lacking, or were before lacking, there is also lacking at this time any genuine play which, bearing true life in itself, awakens, nourishes, and heightens life.

In this is founded the remark of a youth who had played a great many of such boyish plays which had bloomed out from his inner nature, when he said, — in reference to boys who are of the right age for these plays, but whose life is not awakened for them, or is dulled, and who now idly lounge around, getting in their own way, as it were, — "I do not understand; these boys cannot play at all; yet how many plays we had at their age!"

This fact makes it clear that the play at this age must be guided, and the boy developed for it; that is, his individual life (his school-life, and his life of outward experience) must be made so rich that it must necessarily break forth in joy from within, like the blossom from the swelling bud. Joy is the soul of all that is done by the boy of this age.

The plays themselves may be and are plays of the body, either exercising powers and dexterity, or purely as the expression of the spring and pleasure of the life within; or plays of the senses, exercising the hearing, such as hiding, etc., exercising the sight, shooting-plays, and color-plays, etc.; or plays of the intellect, plays of reflection and judgment, draughts, etc. As such they are already arranged and considered, though they are but rarely suited to the true object of play, the spirit of the play is but rarely comprehended, and the plays are but seldom managed in accordance with the needs of the boy.

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k.

THE RELATION OF STORIES AND TRADITIONS, OF FABLES AND FAIRY-STORIES, CONNECTED WITH THE EVENTS OF THE DAY, OF THE SEASON, AND OF LIFE.

Section 97.

The sensation and feeling of one's own present life in one's own breast, the personal thinking and willing, making themselves known

almost unconsciously, almost only as an impulse in one's own mind, are the direct personal perceptions of boys of this age, as they are indeed the most important perceptions for mankind in general; for man understands other things, the life of others, and the action of other powers, only in as far as he understands himself, his own power, and his own life.

But the comparison of a thing with itself cannot and does not lead to the knowledge and insight of the thing; therefore the personal present life (the phenomena of the inner life, thoughts, feelings, sensations), compared with itself, does not bring its nature, its cause, and its significance, to the knowledge and insight of any one. In order to become clear itself, it requires to be compared with something else, something different; and certainly every one knows that comparisons at a certain distance are more effective than comparisons with objects which are too near.

Such points of comparison for the personal life which the boy himself perceives, in which boys whose life is especially active see their own life and its phenomena as in a mirror, and measure it by and with these points, are given now by the perception of the life of another.

The feeling of perception of personal life, of the stir of life, is crushed down, or disappears involuntarily and irresistibly, if the boy cannot grasp it, if he cannot become conscious of its nature, its cause, and its result; but the active mind of the capable, vigorous boy, seeks, wishes, and requires *this;* indeed, it is his greatest need, it is that which preserves his inner life.

This is the most essential reason why boys like so much to hear stories, traditions, and fairy-tales, and prefer them when they begin with the statement that they have actually happened at some time, or that they lie altogether only in the province of intellectual activity.

The power which scarcely yet sprouts in the mind of the boy comes to him in the tradition, in the fairy-tale, and in the story, grown to a complete plant, with blossoms and fruits which are most beautiful, but as yet scarcely dimly conjectured.

How heart and mind expand, how the spirit strengthens, how freely and vigorously life unfolds, when the comparison is remote!

As it is not the gayety of color as such which charms the boy in the flowers, but a spiritual, invisible truth lying far deeper, so, in fairy-tales and in traditions, it is not the gay forms he meets which charm him, but the spirit and the life, by which the boy can measure

his own spirit and life. It is the direct perception of fettered life, and of freely-acting power working according to the laws contained in it.

The story brings forward other people, other relations, other times and places, other and even quite different forms; notwithstanding this fact the auditor seeks his image, he sees it, yet nobody can say to him, "it is your image."

Have not many seen and heard, even themselves experienced, how, first of all, children under the age which now unfolds its powers and its life under our observant gaze, have heard their mother tell the simplest little stories (for example, of the birdie singing and flying, building its nest, and feeding its young) half a dozen times, and have nevertheless repeatedly begged their mother to tell them again?

But it is just the same with the boys whose life we would now so much like to comprehend and penetrate.

"Do tell us something," often say those who are listening to the companion who had already many a time willingly told them stories.

"I do not know any more. I have already told you all I know."

"Well, then, tell us this story, or this one."

"I have told you each of those already two or three times."

"No matter, tell them to us once more."

He tells them, and see how his auditors attend to each word; how they take each from his lips, as if they had never heard it before.

It is not desire for inactivity of mind which leads the boy whose life is fresh to like stories; it is not inactivity of mind which is pleased by hearing genuine life-breathing and life-awakening stories, for see the strained attention of the listener. You can see how, with the genuine story-teller, the inner life of the genuine listener is roused, how he is carried out of himself, and how he thereby measures himself.

This proves that a great spiritual efficiency lies in story-telling; that it is not the gay forms that enchain the boy; that through it, spirit speaks directly to spirit.

Therefore ear and heart open to the genuine story-teller, as flowers open to the spring sun and the May rain. The spirit breathes in the spirit; the power feels the power, and absorbs it.

Story-telling is a real, strengthening spirit-bath; it is a practising school for the spirit and the power, a school for testing personal opinion and personal feeling.

But, for that reason, genuine and, consequently, efficacious story-

telling is not easy; for the story-teller must take life into himself in its wholeness, must let it live and work whole and free within him. He must give it out free and unabbreviated, and yet *stand above the life* which actually is.

This standing above life, and yet grasping life, and being stirred by life, is what makes the genuine educator. Therefore either youth or age relate well. The mother relates well who lives only in and with her child, and who knows no care but that of fostering its life.

The man, the father engrossed and fettered by life, who, while in the wagon of life, has to curb cares, necessities, wants, and vexations, will seldom tell stories well; that is, so that the story-telling shall please the children, so that it will influence, strengthen, and elevate their lives.

The brother only a few years older, the sister only somewhat more advanced in age, neither of whom as yet know life in its rough actuality, who are not yet fettered and hardened by life, but still stand outside of it; and the much experienced grandfather and old man, who looks on life from a higher standpoint, having either stripped off or pierced through the hard bark of life; and the old, tried servant, whose heart is filled with satisfaction by the consciousness of faithful fulfilment of duty, — these are the favorites of the listening boys.

There needs not the addition of a practical application, nor the impressing of a moral.

The related life purely by itself, in whatever form it may be, even if it only appears as an acting power, has made a deeper impression in its sentiments, its effects, and results, than any practical application and prominent moral added in words will and can make; for who knows what was and is the need of the wholly opened mind of the life aroused to feeling?

We tell too few stories to children, and those we tell are stories whose heroes are automata and stuffed dolls.

A good story-teller is a precious gift; blessed is the circle of boys that rejoices in one; he effects much; he has an ennobling effect upon them, so much the more ennobling that he does not appear to intend it. Warmly and respectfully do I greet a genuine story-teller, and with fervent gratitude do I reach to him my hand. Yet he has a better greeting than mine. See what joyous faces, what shining eyes, and what glad jubilee, welcome him, and what a blooming circle of glad boys press around him, like a garland of fresh blossoms and twigs around the bards of joy and bliss.

Yet, with boys of this age, spiritual activity fructifies, especially in union with bodily action; therefore the awakened and aroused inner life should immediately have an outward object by which it can make itself known and abiding.

Therefore, for boys of this age, the listening to stories should be always combined with activity, for the purpose of bringing forth outward work.

But, in order to be especially beneficial and effective, story-telling should be also connected with the events and occurrences of life.

An apparently insignificant occurrence in the life of a neighbor develops to-day to an event of such importance, that it not only determines his inner peace as well as his outward welfare, but also influences the lives of many others.

Whatever was similar to this event in the personal life of each individual, or occurred to friends of his, — all are combined with the event of the day; and see how each boy, excited by the actual event, is all ear.

He takes each story as a conquest, grasps each as a treasure, and inserts into his own life, for his own advancement and instruction, what each story teaches and shows.

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l.

Section 98.

Outdoor life, life in Nature, is pre-eminently important, especially for the young human being, for its effects are developing, strengthening, elevating, and ennobling. It gives life and higher significance to all.

Therefore little excursions and longer walks are essential as an excellent means of education and schooling, even in beginning boyhood and the first school-time.

Therefore if man is to attain his whole destiny, if he is to raise himself to the highest stage he can reach on earth, and if he is to be a vigorous whole, he must feel, know, and recognize himself as a whole, as well with God and humanity as with Nature.

This feeling of the whole, in order to become itself a whole, must grow up with man from an early period of his life. He must divine the coherence of the development of Nature and the development of man, of the phenomena of Nature and the phenomena of man; he

must also divine their reciprocal references, that is, the different impression on one and the same man conditioned by outward limitations proceeding from Nature, or by inward limitations proceeding from man, so that man may as much as possible penetrate into the phenomena and character of Nature, and that it may become to him more and more what it should be, — a guide to higher perfection.

In this spirit of accord, union, and active coherence of all the phenomena of Nature, and in the perception of the necessity by which, from the nature of life and power, plurality proceeded and still proceeds from unity, manifoldness from singleness, the impression of the great from the appearance of the small, — in this spirit all longer walks and shorter excursions of boys of this age are to be made, and from this perception are to be considered what these walks and excursions bring to view.

This is the reason why all boys on their excursions march forward so vigorously in order to take into themselves quickly a great whole. It gives them so much the greater pleasure to seek out the individual parts, if a relatively greater whole has been already grasped, though that whole may be by no means the greatest possible.

These short excursions and longer walks will make the boy look upon the part of the country in which he lives as a whole, and will make him feel Nature to be a continuous *whole*.

Without this, what would be the direct spiritual utility of all walks for the pupil?

They would deaden, instead of animating; they would empty, instead of filling.

As man considers the air by which he is surrounded as belonging to himself, and breathes in pure air for bodily health, so he will consider the pure clear Nature which surrounds him as belonging to himself, and will allow his whole nature to be penetrated by the spirit of God which dwells in Nature.

Therefore the boy should early view and recognize the objects of Nature in their true relations and original connections; he should learn by his longer walks to know his own neighborhood from beginning to end; he should roam through the adjoining country; he should accompany his brook or little river along its course from its source to its mouth, and observe the local differences in respect to the soil; he should wander about on the heights that the ramifications of the mountains may be plain to him; he should climb to the highest points, that he may survey the connection of the whole surrounding country, and be able to describe it to himself.

It should be made clear to him, by looking at the thing itself, how the form and formation of hill and vale, and the course of the river, reciprocally condition one another.

He should look at the products of the hills, of the valleys and plains, of the earth and water, in the places in which they are; he should endeavor to search out in the higher country around him the places from which the stones rolled on by the water, and the river and field-stones which the low country shows him, came, and in which they were formed.

The boys, in their walks and excursions, should see the life of the animals and plants in their usual dwelling-places; they should see how some sun themselves, and absorb light and warmth, and how others seek darkness and shadow, coolness and moisture.

They should see how the objects of Nature which seek shadow were in close connection with that which gives shadow, and, as it were, produced by it; and those which seek light and warmth were in close connection with that which creates the supply of light, and develops warmth.

During these walks the boy should seek out on many sides the way in which the place of abode and the food seem to condition the color, even the form, of the natural objects which have higher activity of life, as, for instance, the caterpillar, the butterfly, and the insects that infest plants, agree in form as well as color with the plants on which they belong; nor should the fact escape his attention that this outward similarity affords protection to the creatures, and that the higher orders of the animal kingdom utilize this similarity for their protection with instinct that is almost reflection. For example, the finches, in building their nests, make them almost indistinguishable from the branches and trees on which they are placed; indeed the time of life and the expression of color of all creatures is in harmony with the character of the time of day, and therefore with the effect of the sun; day-butterflies have bright vivid colors; night-moths, brown or gray, etc.

By his own observation and his own discovering, by his own notice of this continuous and vivid coherence of Nature, by the direct view of Nature itself, not by explanations in words and ideas for which the boy has no intuition, there shall dawn upon him early, and, however dimly at the beginning, yet more and more clearly, the great thought of the inner, continual, vivid connection of all things and phenomena in Nature.

But, first of all, the life, occupations, and calling of man, later, his social relations, his character, his manner of thinking and acting, especially his morals, his manners and customs, and his language — all this will all come to the boy on his excursions in its great coherence with Nature.

This, however, must be left in the indication, as it is in reality, to the later stages of development and cultivation of the boy and youth.

From the consideration of the means of instruction and manner of teaching thereby conditioned, which necessarily coincide with the striving of man toward development, the requisitions for the knowledge of number, of space, of form, of exercises in speech, of writing, and of reading, come out clearly and definitely from the consideration of the outside world and the practice of language; and in these branches of instruction were denoted the points at which each of these subjects grows forth of itself, as a particular branch, from the more general teaching before given.

Since, now, these subjects of instruction, in accordance with their nature, are introduced later than those before treated, and come in for the first time when the fundamental teaching from which they develop has been carried through to a certain point, the consideration and accomplishment of them is postponed till the former studies are wholly completed.

But the above-named subjects of instruction belong in the second half of the time of boyhood now before our consideration. Therefore the particular consideration of them necessarily joins directly that of the subjects of instruction hitherto considered.

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m.

KNOWLEDGE OF NUMBER.

Section 99.

The development of number, the separation of the perception of the object and the impression of the thing from the conception of number, and thus the capacity of counting at least to ten, and then to twenty, was clearly presented and much used by what has gone before.

By this manifold application of number, the scholar soon finds the necessity of a more fundamental, comprehensive knowledge of number; and thus the science of number is introduced, and comes to him with necessity and pleasure, desired by him as an especial subject of instruction.

So it should always be. No new subject of instruction should come to the scholar, of which he does not at least conjecture that it is grounded in the former subject, and how it is so grounded, as its application shows, and concerning which he does not, however dimly, feel it to be a need of the human spirit.

Number, as quantity and size, shows at the first glance the property which it has in common with the different objects, especially with the objects of Nature, of a double origination, — the origination from without by accretion, and that from within by growth and increase from itself.

But as number shares with the objects of Nature its manner of origination, so also does it share the property of disappearing, of vanishing, of annihilation.

But this annihilation also shows a two-fold difference; the one being destruction from without; the other, dissolution from within.

But in every place where origination and annihilation, increase and decrease, are found, there, also, is comparison, which again is naturally either external or internal, according to outwardly visible, or inwardly perceptible law.

And so, therefore, the science of number separates into knowledge

of the formation of number
according to outward, according to inward law;

the annihilation of number
according to outward, according to inward law;

and

the comparison of number
according to outward, according to inward law.

This inner coherence of Nature and number, of the laws of number and Nature, just pointed out, expresses itself so irresistibly now — when the essence of Nature comes so speakingly and actively near to man that he can no longer reject the notice of the laws of Nature which express themselves everywhere and repeatedly — that the expressions, inorganic and organic formation, annihilation, and com-

parison of number powerfully impress themselves in an observation and treatment of number in accordance with the laws of Nature and reason, an observation and treatment which have already continued fifteen years. (Jas. Schmid's Number, 1810.)

All instruction, and therefore, also, the instruction in arithmetic, must meet not only the anticipation of the repetition of the laws of Nature in many directions in the life, thought, and action of man, which anticipation expresses itself early even in boyhood, but, in general, the anticipation of a comprehensive proportion of law as active as it is necessary, in all things; consequently, instruction in arithmetic must call attention to the laws of number, make them prominent, and bring the scholar to clear consciousness of them.

The prominence and vivid intuition of the laws of number, and the exercise of quick comprehension of and penetration into the relations of number, are of equal importance; neither of them should be repressed in favor of the other: the scholar must, at this stage, be just as quick in numbers as he must be in perceiving and actualizing the relations of number.

Therefore representation by himself, and consequent clear perception and comprehension of the relations of number to the quantity itself; practice and repeated application of these relations; survey of the whole, bringing out the individual parts; and repetition in concert — are the most essential points to observe in this instruction, as well as in each which treats of a similar subject.

The course of instruction proceeds from what has just been said, and can easily be worked out by means of what is already known concerning it; wherefore the following indications will suffice:—

1. Connection with the preceding.

Tests of the skill in counting.

Counting from one to twenty forward and backward continuously, or leaving out and over-leaping some of the numbers.

2. Representation and view of the series of numbers as a continuous whole.

Count from one to ten, and make each time as many vertical lines (of one square in length) as the word for the number points out; thus with one, |; with two, || and in a vertical direction, one below another: —

(One) . . . | ;
(Two) . . . || ;
(Three) . . . ||| ;
(Four) . . . |||| ; etc.

"Have you done it?"

"What have you done?"

"We have counted from one to ten, and have made each time," etc.

"Good; you have thus represented the natural series of all numbers from one to ten."

"What have you represented?"

Rendering prominent, viewing, and becoming conscious of the reciprocal relation between the word and the quantity, the number itself.

Proceeding from the word.

Teacher and scholar speak together, pointing to the represented series: —

One is | (one one);
Two is || (two ones);
Three is ||| (three ones); etc.

Proceeding from the number or quantity.

Teacher and scholar speak together, pointing to the represented series: —

| (one one) is one;
|| (two ones) is two;
||| (three ones) is three; etc.

Word and quantity pass into one another, and appear as one: or the number merely is looked at: —

| one is one;
|| two is two;
||| three is three; etc.

The whole is gone through by teacher and scholars, speaking together as before.

3. Setting down, and considering the numbers as even and odd numbers.

Teacher and scholars speak together as usual, looking directly at the thing: —

| one is neither even or odd;
|| two is an even number;
||| three is an odd number; etc.

The conceptions of even and odd numbers can here only be put down, but receive later their confirmation.

It is well here to call the attention of the scholar to a great, widely-prevailing law of Nature and thought, which is this: that, between two relatively-different things and conceptions, a third always stands in the middle, as it were, uniting both in itself with a certain equilibrium; so here, between even and odd, a third, which is neither; so, in form, the right angle between the acute and obtuse angles; so, in speech, the open sounds between the voice-sounds and the closed sounds. A thinking teacher, and scholars roused to independent thought, cannot but become attentive to this and other important laws.

Representation of all even numbers in regular sequence up to ten.

"Represent all the *even* numbers up to ten, so that the spaces for the odd numbers lying between may remain free and unoccupied": —

||;
||||;
||||||; etc.

Naming of this series as *the natural series of all even numbers up to ten.*

The same with the *odd* numbers.

As soon as each scholar has represented each series on his slate, the teacher represents it on a large blackboard, and the scholars, when answering, must always have in view these actual representations of number, either on the blackboard or their own slates; they are also to go through with it repeatedly with the teacher's *pointing.*

Single questions which proceed from the exercises; for example,

|||| (pointing to the number itself). "Which of the even numbers is four?"

||||| "Which of the odd numbers is five?"

"How many even numbers are there from one to ten?"

"How many odd numbers are there from one to ten?"

"Are there more even or more odd numbers in the natural series of all numbers from one to ten?"

"Why are there more even than odd numbers?"

4. Formation of the number by addition from the outside.

"Add | to each number of the natural series of all numbers up to ten, and see what comes out each time."

Recitation in concert with pointing: —

| and | are ||;
|| and | are |||; etc.

Single questions.

"When I add | to each number of the natural series of all numbers up to ten, what results?"

"There results again a natural series of all numbers, but from two to eleven."

"If you add | to a number, what kind of a number always results?"

"The next larger number."

"Add | to each number of the natural series of all *even* numbers, and see what comes out."

Recitation in concert: —

|| and | are |||, etc.

"If | is added to an *even* number, what kind of number always results?"

"An *odd* number."

"If | is added to each number of the natural series of all *even* numbers, what results?"

"The natural series of all *odd* numbers."

The same course is now pursued, and the same questions asked, with regard to the numbers of the natural series of all *odd* numbers.

Bringing out and reciting in concert the two laws: —

| added to an even number gives always an odd number;

| added to an odd number gives always an even number.

In the same way that | was hitherto added, || is now added to each of the three different series. (The course of teaching is as before.)

Bringing out, and reciting in concert the following laws.

When || is added to a number, there results always the second following number.

When || is added to each number of the natural series of *all* numbers, there results the natural series from three to twelve.

|| added to an even number gives an even number.

|| added to an odd number gives an odd number.

When || is added to each number of the natural series of all *even* numbers, there results a natural series of all even numbers from four to twelve; etc.

|||, ||||, etc., are added in the same way.

By the addition of |||, there results always the third following; by the addition of ||||, the fourth following number, etc.

Hence this general law: —

If I add one number to another, there results a number as far distant from the other as the added number has units or ones.

"Add the next following number of the natural series of *all* numbers from one to ten, and see what results."

Represent it on your own slates: —

| and || are |||;
|| and ||| are |||||;
||| and |||| are |||||||; etc.

Recitation in concert, and bringing out of questions; for example: —

"The third and fourth numbers are how much, or give what number?"

Law: —

When to each number of the natural series of all numbers from one to ten, the next following number is added, there results the natural series of all odd numbers from three to nineteen.

Proceed in the same manner with the series of *even* and of *odd* numbers.

Bringing out and reciting in concert of the laws: —

An even number and an even number give always an even number.

An odd number and an odd number give always an even number.

An even number and an odd number give always an odd number.

General law: —

Two numbers of the same kind give always an even number; two numbers of different kinds give always an odd number.

The next following number, added to each number of the natural series of all *even* numbers, gives a series of even numbers, increasing always by *four*, from six to eighteen.

The next following number, added to each number of the natural series of all *odd* numbers, gives a series of even numbers, increasing always by *four*, from eight to sixteen.

As hitherto only *two* numbers were added together, *three* and more must now be added together; for example: —

||, ||, and | are how many?

Begin with the smallest numbers, and at first do not let the amount rise above *thirty*.

Here the questioning, and, as usual, the representation on their slates by the children themselves, are particularly important. The proof and the reason also proceed from the representation by the children themselves.

It is important to add together, the 1st and 2d; then the 1st, 2d, and 3d; then the numbers from the 1st to the 4th, etc., in the natural series of all numbers.

Now recitation in concert, and bringing out of single questions.

"How much do the first and second numbers make?"

"How much do the first to the third numbers make?" Etc.

"What is the sum of *all* the numbers from one to ten?"

"What is the sum of all the even numbers up to ten?"

"How much do all the uneven numbers up to ten make?"

The following questions are very important.

"How great is the sum of the *first* and *last* numbers in the natural series of *all* numbers from one to ten?"

"What is the sum of the second number and the next to the last?"

"What is the amount of the third number and the third from the last number?" Etc.

"What are the amounts in all these cases?"

Question in the same way with the series of even, and that of odd numbers.

General law: —

The amounts of two numbers which are equally distant from the ends of a regularly increasing series of numbers are always equal to one another.

5. Contemplation of the composite unities.

"Represent on your slates the natural series of all numbers from one to ten."

The teacher does the same on the blackboard.

The teacher now says, pointing to the blackboard, at which all the scholars look: —

| is a *one*.

|| two ones thought of as a whole is a *two*.

||| three ones thought of as a whole is a *three*, etc.

That which is thought of as an undivided whole is called a *unit*. The teacher says, and the scholars repeat after him: —

| one one is a simple unit;
|| one two is a compound (literally, *put together*) unit;
||| one three is a compound unit, etc.

"Represent several twos on your slates."

"Represent several fours." Etc.

"Represent on your slates the natural series of *all twos* from one two to ten twos."

"Can you also represent the natural series of *threes* or *fours?*"

Teacher and scholars together: —

|| one two is neither an even nor an odd number of twos.
|| || two twos is an even number of twos.
|| || || three twos is an odd number of twos, etc.

The treatment of the compound units is exactly like the treatment of the simple units. Yet just on account of these compounds it may be well to extend it considerably, particularly with boys whose power of comprehension and especially of summing up is weak.

A very important exercise, especially in reference to the relation of number to Nature, but also in respect to the laws which lie hidden in number itself and in other numerical relations is, —

6. The representation of numbers under all forms.

"Can one of you represent the quantity of two in different ways? Whoever can, may do it."

"How can you represent two?"

"By two ones (||) and by a two (||)."

"Can you also represent the three under different forms?"

"Represent all the forms."

|||, || |, | ||, | | |.

"In how many ways can four be represented?"

By ||||, ||| |, || ||, || | |, | | | |; that is, by a four, a three and a one, two twos, etc.

With young and weak scholars go at most to seven.

It is especially important to seek out the *law* for the discovery of *all* forms under which each number can be represented.

This law comes out very easily, if one only follows the course in which and according to which the forms develop; yet on account of

the multifarious recapitulation and the greater survey which it requires, the seeking-out of this law of Nature is suitably deferred to the next stage of the contemplation of numbers, if scholars not unusually advanced go through this course of teaching.

The law itself is as follows: —

Each following number gives in all (including all forms, even those which are only different in position) twice as many forms as the preceding number gave; or, to give an exact definition, the number of the forms of each number is obtained by raising the number 2 to as high a power as the number itself has units, minus 1; for example, 4 gives $(4 - 1 = 3) = 2^3 = 8$ forms.

7. The diminishing and destruction of the number from without is carried through similarly to the formation of the number from without, but reversed; the corresponding reversed laws also are rendered prominent, and brought to the knowledge of the scholars.

8. Formation of number from within according to inner law; or formation of the numbers according to the law or the determining of another number; or formation of the number by inner increase.

"Represent on your slates the natural series of all numbers from one to ten; take each number as often as there are units in one, and see what comes out."

They represent: —

|, |, |;
||, |, ||;
|||, |, |||; etc.

Now recitation in concert: —

There is one unit in one.

| taken as often as | has units, or taken | time, gives |;
|| taken as often as | has units, or taken | time, gives ||;
||| taken as often, etc.

Otherwise expressed: —

| repeated according to the law of | gives |;
|| repeated according to the law of | gives ||;
||| repeated according to the law of | gives |||; etc.

Still otherwise expressed, and repeated in concert: —

| increased according to the law of | gives |;
|| increased according to the law of | gives ||;
||| increased according to the law of | gives |||; etc.

Otherwise expressed, and recited in common: —

| taken | time gives |;
|| taken | time gives ||;
||| taken | time gives |||; etc.

Again: —

|, | time gives |;
||, | time gives ||;
|||, | time gives |||; etc.

Finally: —

| times | gives |;
| times || gives ||;
| times ||| gives |||; etc.

"Represent again on your slates the natural series of all numbers from one to ten; now take the one as often as there are units in each of the numbers, and see what you get."

This can again be expressed in one or several of the ways before cited.

The same procedure is carried through with the ||, |||, and each of the following numbers as with the one, and recited in one or several of the ways just given.

The object of these different modes of expression is, that the scholar may arrive at the inner significance of the expression, *time*, and perceive that it presupposes the inner determining of another number.

"First repeat the || as often as each number of the natural series of all numbers has units."

"Then each number of the natural series of all numbers as often as the || has units."

"See what comes out in both cases, and place the two series opposite one another."

They represent: —

| (times) || (is) || (two);
|| (times) || (are) ||, || (four);
||| (times) || (are) ||, ||, || (six);
|||| (times) || (are) ||, ||, ||, || (eight); etc.

Otherwise expressed: —

|| (times) | (is) || (two);
|| (times) || (are) ||, || (four);
|| (times) ||| (are) |||, ||| (six);
|| (times) |||| (are) ||||, |||| (eight); etc.

Single questions are now asked, first from one series, then from the other, and then from the same lines in both.

"Two times seven and seven times two are each how much?"

"What is the difference in these two ways of making fourteen?"

Series of the different ways of repeating the three and the four can also be made, and each two series compared.

Now single questions are asked indiscriminately.

"Six times nine are how many times one?"

"If you take each number of the natural series of all numbers as often as | has units, what always results?"

"Always the number itself."

"If you take each number as often as the || has units, what *kind* of a number results?"

"Always an even number."

"If you take each number as often as the |||| has units, what *kind* of a number then results?"

"Always an even number."

"What *kind* of numbers are two and four?"

"Even numbers."

"Now what law follows from this?"

"Each number taken an even number of times gives always an even number."

"Take each number three and then five times, and see what results."

"Even and odd numbers."

"Then the law?"

"Each number of the natural series taken an odd number of times gives even and odd numbers."

Thus are the following laws to develop: —

An even number taken an even or an odd number of times gives always an even number.

An odd number taken an even number of times gives an even number.

An odd number taken an odd number of times gives an odd number.

9. Concerning the square numbers.

"Represent on your slates the natural series of all numbers from one to ten; take each number of the series as often as it itself has units, and see what results."

Recitation in concert: —

|, | time gives | (one);
||, || times gives |||| (four);
|||, ||| times gives ||||||||| (nine); etc.

"What have we done?"

"We have taken each number as often as it itself has units," or

"We have increased each number by its own law."

"The number or quantity which results when I increase a number by its own law is called a square number, or a square."

Single questions.

"What is the square of this or that number?"

"Of what number is this or that number (for instance, 64) the square?"

"The number of which another number is the square is called the *root* of this square, and also the *square root*."

"Can any number be taken a square number of times?"

"Yes; for instance, five can be taken nine times."

"Can a square number also be taken a square number of times?"

"Yes; for instance, nine can be taken four times."

The further advance is manifest in the thing itself.

10. Representation of all forms in which each number can be made by repetition; or, representation of the different ways in which each number can be formed by increase.

"Try in how many ways you can get || by increase."

"In two ways; either by taking the || one time, or by taking | two times."

"Represent on your slates all the forms in which each number of the natural series of all numbers up to ten can be formed by repetition or increase, and see what you remark about it."

"Do all numbers result in the same number of ways by repetition?"

"No. Several numbers, such as one, two, three, result only in two ways by repetition."

"In what two ways do these numbers always originate?"

"Either the number is increased by the law of the one (of unity), or the one (unity) by the law of the number."

"Numbers which originate only in these two ways by increase are called *prime numbers*."

"What are prime numbers?"

"Name all the prime numbers up to thirty."

"How many prime numbers are there up to 10? to 20?"

"What one of the numbers up to thirty can be represented in the most different ways by repetition?"

11. Diminishing or destroying the numbers according to inner law, or by repetition.

This, as well as the *division* of the numbers (not of the unity) which depends upon it and is conditioned by it, and the demonstration of one number *being contained* in another, can be easily carried out according to what has been hitherto presented.

Each person can now likewise easily accomplish—

12. The comparison of the numbers according to outer, and

13. The comparison of the numbers according to inner laws, by what has been hitherto pointed out.

The boy of this age who is at this stage of development should not be carried beyond this point of comparison of numbers according to the inner law. The consideration of numbers in relations which presuppose a greater survey and a greater comprehension of number belongs to the following stage of development of the boy, and will in consequence be pointed out with it.

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KNOWLEDGE OF FORMS.

Section 100.

The contemplation of the outer world and the language exercises led, as was before pointed out, to the perception and consideration, to the knowledge of form. Yet the objects of the outer world show, in general, such a manifoldness of form, they are so complicated, and therefore so difficult to perceive, and especially to define, that the thing itself leads more and more to a further descent to objects of simple forms, and requires a descent to such forms as have simple straight surfaces, to such as are equiangularly or rectangularly bounded.

But the knowledge of the linear lies at the foundation of the knowledge of each form; the forms are viewed and recognized by the intermediation of the straight-lined.

Therefore, with the perception and consideration of the objects according to their direction in themselves, the objects composed of

curved lines are soon dropped, and the objects are at first considered on the basis of the straight lines; for example,

the circumscribing surface of a stove,
the glass on the clock,
the rim of an inkstand,
are *curved;*
the window-hangings,
the frames of the windows and looking-glass,
the cross-pieces of the window,
are straight-faced and *straight.*

Now the objects and their parts and boundaries are considered in respect to their position and their direction from one another; for instance,

the two long and the two short window-hangings
are *parallel;*
one long and one short window-hanging
are *right and left from one another;*
one long and one short side of the window-hangings
are *parallel;*
the two cross-pieces of two adjoining windows
have the *same direction.*

So with the consideration of the chair and table legs, etc., the different surfaces, edges, and corners of the table, etc., in respect to their direction, position, number, connection, and form.

So with the consideration of the room; its form; the position, form, and direction of its walls, corners, and angles, etc.

From the consideration of straight-surfaced *compound* objects we pass to the consideration of straight-surfaced simple bodies, cubical, beam-shaped, tabular, pyramidical, etc., bodies.

If, now, the scholar, by the consideration of the surfaces and edges of these solids, has recognized the linear relation under which and in which they were viewed, and thus each edge as a line, and so the linear, which is at the foundation of each form, is clear to him; then is developed in the boy the need to look at the linear, and the relation of lines to one another.

The boy has now developed to the stage at which the instruction for actual knowledge of form, and, first of all, for perception and knowledge of form on and in a plane, is needed.

The knowledge of straight-lined forms on and in a *plane* begins with consideration of one and single lines (at first unconnected, and,

in respect to position and direction, as parallel; having the right direction and not parallel; and the latter again, as running right and left, and having the same inclination), and with seeking out how the number, position, and direction of the lines reciprocally condition one another.

Then the consideration advances to the combinations, and shows how many can be combined and uncombined, firstly in general; secondly, according to the number of the points; thirdly, according to the relation of the position of the ends to the points of union of the lines, either inside or outside of the points of union.

The next step is consideration of the direct result of lines combined in points, the angles in respect to their number and in respect to their relations to the lines and points of union; that is, consideration of the angles in respect to position and form.

Next comes consideration of the lines in reference to the space which they enclose, and consideration of the form of this space conditioned first by the number and position of the lines, then by the number, form, and position of the angles, the number, form, and position of the corners.

As hitherto closed spaces or formed surfaces were considered each by itself, they must now be considered in combination, first with lines, then with angles, and finally with surfaces. Surfaces are combined with surfaces alike in kind and name, and unlike in both, and, again, either intersecting one another in points, or in lines (sides), or in surfaces (planes).

The concluding point is where several surfaces alike in name but unlike in kind, and especially several squares and equilateral triangles are combined in one form; therefore squares and triangles (forms in other respects differing in kind) are found again in a third; for instance, *three squares* combined and intersecting one another define a *dodecagon* by their corners; *four squares* combined in the same way also condition a dodecagon by their corners. The dodecagon is therefore the connecting form of the ternary and quaternary; but the dodecagon points to the polygon; and the polygon without corners is the circle. The limit of the knowledge of form, by means of forms limited by straight lines, is therefore the point at which they designate, require, and condition the circle.

To carry through the internal part of this instruction, and thereby to show the living wholeness of the most peculiar laws which these considerations bring to perception, and which recur in peculiar forms

in the different subjects, especially in number and the laws of number, is rendered impossible by the want of space as well as by the lack of representations of form which are excluded by the purpose of this work; yet what is most essential concerning the course of teaching, particularly concerning the nature of the knowledge of space, will be noticed in the following stages of cultivation of the boys and scholars. There is but one more remark to make here; namely, that the instruction in the knowledge of form, at this stage of the boy's development, has to retain the frequently-returning representation and actual view of the forms far more than to require too quickly the perception of the truths in their generality, abstracted from form, and also from individual and personal representing. Too compound connections of relations, and the sequence of conclusions which are consequently also too compound, must be avoided at this stage. Each relation is viewed purely by itself and for itself, but in as many forms as possible, and in quite simple evident combinations.

The consideration of lines having like inclination leads out from form, especially to free drawing.

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EXERCISES IN SPEECH.

Section 101.

We now turn to a quite different side of the instruction, the pure opposite of that just considered; for the scarcely considered subject of that instruction was visible, and could be held fast. The subject, or really the material of this instruction, is audible and vanishing; therefore the two subjects are opposite to, yet like one another, completing one another, and therefore belonging together: the recognized and appropriated form seeks to give again the object; it is the province of language also to portray the object.

It was the business and purpose of the language exercises to view the objects of the outside world correctly and clearly, and to point them out clearly and precisely by words. The exercises in speech deal with language as material to use for representation; they deal with the exercises for the knowledge and correct use of this material as an audible one; and, first of all, again with the knowledge, practice, and attaining of consciousness of the way and manner in which man,

as it were, creates and at the same time forms the material by means of his organs of speech.

Therefore the exercise of speech considers the *word* purely by itself, and wholly abstracted from the object.

The exercises in speech have, therefore, the purpose of bringing the boy to the knowledge of, and clear insight into, language as material.

From this, the connection of language before pointed out, especially of the original word, and its different kinds of parts, with the objects to be designated and their properties; or in other words, the consideration of the necessary opposition yet likeness between language and object, — the *word-knowledge*, — now necessarily comes out as a new branch of instruction.

The different size of the words is the first thing which comes to our notice in considering the word as such; and the scholar also must be brought to perceive this by the exercises in speech.

But the size of a word is at first recognized by the greater or less number of its syllables. The different number of syllables in each word is, therefore, the first thing which is brought to the insight of the scholar by the exercises in speech, and he is to know and distinguish the words as composed of one, two, three, and more parts.

Next to the number of the syllables there comes up for consideration the *difference of kind of the parts* of each syllable. A prevailing remark is, that there is no syllable without a voice-sound (vowel). To learn to know the different voice-sounds, and their different kinds, is now the next requirement.

The voice-sounds appear here as simple and compound, and the former again as principal and secondary. The difference between the voice-sounds and the different kinds of voice-sounds lead directly to the observation of the different use of the organs of speech, especially the different positions of the mouth, and to the conception of the dependence of the purity and certainty of the voice-sounds upon the precision and suitableness of the opening of the mouth, etc.

If, now, the nature and manner of origination of the voice-sounds is recognized as far as the stage of development permits, the parts of the words which form, as it were, the *bodies* of the *vowels* (the consonants), impress themselves upon our observation. They soon show the essential difference, that some, brought forward and considered alone, are still, in a certain way, audible; these consonants are the *open sounds:* but others are almost inaudible, because they close the organs of speech; these are the *closed sounds.*

Both open and closed sounds show the further peculiarity of being predominantly connected with certain organs of speech, the lips, the nose, etc.; and so the open sounds, first of all, are distinguished as *nose*-sounds (nasal), *lip*-sounds (labial), *tongue*-sounds (lingual), *teeth*-sounds (dental), *palate*-sounds (palatal), *throat*-sounds (gutteral), and *lung*-sounds (aspirate). The closed sounds are distinguished in the same manner.

The open and closed sounds show, as compared with one another and in reference to their origination, the essential difference, that, in their origination and production, the organs of speech are either used with more or less or medium exertion of strength, or else in a different way; and thus different slightly-altered open and closed sounds are produced by the same organ.

Not only does the dependence of the pure, precise utterance of the elements of words, and consequently the dependence of the whole mother-tongue upon the exact and sure use of the organs of speech, become clear to the scholar, but he comes thus to a clear conception of the activity of these organs, which activity conditions and lies at the foundation of each word-element, and he also gains an insight into the way in which this is done. Consequently there comes to the boy by degrees the divination of the inner active coherence of the activity of the spirit, of the body, and of Nature, as, in the subject before us, speech is the product of the spirit through the action of the body, and is a corresponding satisfying image of the way in which the inner as well as the outer world represent themselves to him.

Thus this actively-producing, developing course of instruction in speech shows in its progress that the formation and development of speech, the speech itself, is in itself a great living whole, a life-whole. Between the different kinds of sharply-defined elements of words, the voice-sounds, the open and the closed sounds, there are some intermediate ones.

Further, three different elements of words generally seem to belong to each organ of speech, one of which requires a harder, the second a sharper, and the third a softer or more gentle exertion of strength by the organ of speech.

Far more proceeds from this subject that can be given by the teacher; but few indications are here given on account of limited space.

First of all, in order to lead the scholar to the perception and knowledge of the difference in words in respect to the number of syllables, the teacher pronounces a word of one syllable, and, at the same time, in order to make *visible* the quantity of the parts, makes a horizontal beat with his right hand, then counts one, and makes another beat at the same time; for example,

Teacher { says: *foot* . . . . *one* / beats: — — } at the same time.
(beat) (beat)

Teacher. "Seek out words with which we can also make only one beat, and can also count only one."

Proceeding in the same way as the teacher,

The scholar { says: *head* . . . . *one* / beats: — — } both at the same time.

These and each of the following exercises are continued until the scholars readily do what the teacher requires. The boys are best led to attend to the teacher's requirement by the word "attention."

That which is found and spoken by each individual is, as usual, recited by all, thus becoming a common possession.

Again,

Teacher { *window* . . . . *one, two* / — — — — } exactly at the same time.
(beat, beat) (beat, beat)

"Find words with each of which we can also make two beats, and count one, two."

"Mantel; kindly; morning."

The beating with the hand, in order to make the size of the word and the number of its syllables outwardly *visible in space*, is necessary because it is a deeply-grounded, incontrovertible requisite with all instruction to connect all that is to be known by the scholar and brought forward by the teacher with something which is of an opposite nature: hence that which is lifeless and quiescent, the form, with that which is living and moving, the word; the word, the audible, the living, with the space, the visible, the movement; the inward with the more outward; and the reverse.

Now the more precise the opposite is, if it yet corresponds to the nature which is opposite to it, the clearer is also the impression, and the more securely does the scholar hold it fast.

In the case before us it is particularly important for the scholar to beat with his own hand, because the actual and audible size of the word is thus made perceptible to the *feeling*.

Proceed as above with words of three, four, and five parts.

When the scholars have finished the correct denoting and numerical defining of the parts, the teacher says: —

"Words with which we can make one beat, or count one, are called words *of one syllable*."

"What are words with which we can make one beat, or count one, called?"

Continuing in the same way up to five.

"Name several words of one syllable."

So with words of two, three, four, five and more syllables.

Now, without choice of the number of syllables, the scholars will give words of one or more syllables, in order to determine the number of the syllables; or the teacher will determine the number of the syllables, and the scholars must seek out words having that number; lastly, the boys must themselves determine the words as well as decide upon the number of syllables of each.

When the scholars can readily determine the parts, the instruction advances.

Hitherto the size of the word was determined by the number of its syllables; but the nature and significance of the word depends not so much upon its size as upon the *kind* of its individual *parts* and their connection.

Here the first remark which urges itself upon our notice is, that there can be no syllable, and therefore no word, among the parts of which there is not at least *one* voice-sound (vowel), and that therefore the *voice-sound* makes, as it were, the *soul* or the spirit of each syllable.

That the scholar may himself perceive this law of language, he must now go through with the following exercises.

The teacher utters a word of one syllable which ends with a voice-sound, and, after he has pronounced the word, makes the sound itself especially prominent.

"Go, the voice-sound ō."

Teacher and scholars together, "Go, the voice-sound ō."

In like manner other words of one syllable ending with the voice-sounds u, a, e, i, etc., are pronounced; and these sounds are brought out to individual perceptions.

If the scholars are already so far advanced that they can easily separate the voice-sound from the other parts of the word, the teacher can begin immediately with the stage which now follows, that is, he can utter words of one syllable which have the voice-sound at the end, and let them discover the sound *themselves*.

Teacher, "*So*."

Teacher and scholars together, "*So*."

That word and voice-sound may become clear to the children, and fixed on their minds, it is well that each should be spoken two or three times.

Now teacher questions, "So; the voice-sound?"

Scholars answering together, "ō."

This question and answer also can be repeated two or three times.

In the same way several words ending in the same voice-sound are brought forward, first by one, and then by all of the scholars. The same method is carried out with all the other voice-sounds.

In the same way words of one syllable are now brought forward which *begin* with the voice-sound, followed by such words as have the voice-sound in the middle.

All this must certainly make the scholars individually sure in discovering and determining the voice-sound. Should, however, some of the scholars be still uncertain, the teacher should try in the future exercises to destroy this uncertainty, and must keep a sharp eye on these scholars especially.

By the previous exercises the scholar was led to determine with certainty the voice-sound in words of one syllable.

The teacher now asks the scholars: —

"Is there any word of one syllable which contains *no* voice-sound?"

They answer to this in concert and repeatedly, "There is no word of one syllable which does not contain a voice-sound."

In the same way the voice-sounds in words of two and more syllables are brought to the definite knowledge of the scholar.

In order to avoid confusion, it is well to hold fast the voice-sounds of the first and second syllables, while those of the remaining syllables alternate.

The laws which find a place here will be easily perceived by an observant teacher; and, if his scholars are fitted to receive recapitulating laws, he can make them observe them.

Should the scholars be now still too undeveloped to comprehend

these laws, prominence will be first given them when they recur the second or third time.

That the slower or more extended, and the quicker or more comprehensive procedure with the course depends upon the scholar's power of comprehension, and that in the former case single exercises are to be interpolated, while in the latter case, single exercises are to be quickly ended, need be said only to the teacher who is just beginning the work of instruction.

As before the number of the syllables was determined by the teacher, and the scholars were required to discover suitable words, so now the voice-sounds and their sequence are given and determined by the teacher, and the scholars are required to seek out the corresponding words; for instance: —

Teacher, "*oy, i, y.*"

Scholars, "Boyishly," etc.

The bodies of the voice-sounds (consonants) are brought to the knowledge of the scholar in the same way that the vowels were.

The teacher says, "Moo."

Scholars (repeating several times in concert), "Moo." "Try to say the word *moo*, but without the *oo*." They try it; the pure sound *m* becomes audible.

In the same way several other words of one syllable beginning with *m*, and ending with a vowel-sound (such as *may, my,* or *mow*) are given, and the sound *m* noticed in each.

"Does *m* sound like any of the voice-sounds which you have learned to know?"

"No."

"But what can be said of the audible *m*?"

"It sounds closed."

"Now what can and must we call *m* in contrast with the voice-sounds?"

"A closed sound."

Together, "*m* is a closed sound."

"Say *new*."

"New; new; new."

"Try to say new without the sound *ew*."

Together, "*n*; *n*; *n*."

"Where shall we class the *n*, with the voice-sounds or with the open sounds?" — "With the open sounds."

Together, "*n* is an open sound."

In like manner the *ng* is brought forward.

"Make the sound *n* audible, and find which of your organs of speech are particularly and essentially active."

"Do the same with the sound *ng*."

"What must therefore these sounds be called?"

"*Nose-sounds*."

"How can they be distinguished from one another?"

"As *soft* and *sharp* nose-sounds." "Why?"

"By what organs of speech, and with what use of these organs, are the sharp nose-sound *n*, and the soft nose-sound *ng*, brought out?"

In the same way the scholar is brought to the individual perception and knowledge of each consonant.

Now in certain sequences, and also without precise connection, single directions are given to the scholars, and single questions asked of them; for instance:—

"Make the sharp tongue-sound."

"How do you bring out the soft tooth-sound?" "Show me what you do with your organs of speech to make the soft and the sharp closed lip-sounds." Etc.

Little as it is possible to represent the inner relationship and active connection of even only the primitive parts of words which compose language on a surface by lifeless grouping, as this developing course of instruction presents it to the scholar, yet this may stand for an indication, though only a slight one.

Voice Sounds.

ou

a o u

e i

eu oy

Open Sounds.

Lung-sound, h. Throat-sound, g hard.

	Nose.	Lip.	Teeth.	Tongue.	Palate.
Dull . . .		v	l	r	j
Sharp . . .	n	p	t	—	k
Soft . . .	ng	f	—	s	—

Closed Sounds.

	Lip-sounds.	Teeth-sounds.	Palate-sounds.
Soft	b	th	x
Dull	m	d	g

[The letters in which two organs of speech are used must be determined by the teacher; enough has been given to show Froebel's idea. — Tr.]

By means of the instruction hitherto given, the pupil is now so far advanced that he can recognize with exactness and certainty each element of a word; that he can point out each and make it audible and perceptible according to its nature; also that he is not only conscious of the activity of the organs of speech by which each element respectively is produced, but can give an account of it to himself and others.

The next stage of this instruction brings this capacity to dexterity and certainty by practice, which is given in manifold ways.

The teacher pronounces words indiscriminately, and lets the scholars make the syllables and elements of these words audible and perceptible;

He lets them name the syllables in their sequence; or

The teacher utters several parts of words in a certain sequence, and lets the scholars form the word from these.

These latter exercises, however, will advance in definite succession from the simple and easy to the compound and difficult. However, every observant and thinking teacher can make such a series for himself, and the more active the teacher himself is, — I might say the more he hopes and strives to learn more himself, and the more he seeks to promote the wholeness of the instruction, — the more valuable will it become to him, and the more rich in blessing will it be to his scholars.

With this certainty, readiness, and clearness concerning all the elements of words in respect to their use and their grouping, and also especially in respect to their inner necessary vivid connection, this instruction at this stage of the boy's development is concluded when the length and shortness of the vowel-sounds in the syllables (not the length and shortness of the syllables themselves) have been brought forward and distinguished, which at this stage is particularly important for the writing which now follows.

At the following and later stage of instruction there goes out at this point a new branch, namely, the consideration which renders the

scholar conscious of the length and shortness of the syllables, and thus of the laws of movement contained in the words, and the manifold connections to parts and wholes of movement thereby conditioned.

The requirement which presents itself at this stage of instruction and as instruction is that of connecting the elements of words with certain signs, of making the audible transitory speech visible and abiding; that is, the necessity for *writing* presents itself.

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p.

WRITING.

SECTION 102.

By writing and instruction in writing is here understood by no means fine writing and writing as an art, but merely the readiness and skill to make the transitory, audible words visible and abiding by means of corresponding signs which always remain the same; and thus to make it possible for one's self and others later, by looking at these signs and their connection, not only to think of the same words, and thus of the same ideas, but also to utter the same words either to one's self or others in order in the hearing, to call forth again the same first ideas, conceptions, and perceptions to which they owe their peculiar connections; this is reading, more of which will be given in the following section.

The more important consideration with this instruction in writing is the choice of the characters; they must necessarily have the following properties: —

They must have a peculiar form for each element, must therefore be easily distinguishable from one another, and yet, like the elements themselves, they must stand in a certain connection with one another, or at least point to such a connection.

The original Roman, the old Latin, or the old Phœnician script, as it appears when divested of all ornament, shows a certain connection.

If you describe a square, in this a circle, diagonal lines from the corners of the square, straight lines from the halves of the sides and also parallel to these, then from the two upper angles of the square

oblique lines toward the middle of the lower side, and in the same way from the two lower angles toward the middle of the upper side, and finally draw through the just-named middles of the upper and lower sides and through the middle point of the whole a line returning upon itself in the form of a somewhat compressed 8; all the characters of the oldest Roman, or, if you prefer to call it so, the Phœnician script, can be noted in this truly symmetrical whole with very slight imagination, and in a very recognizable way.

This outward connection of these written characters (similar to an anagram) may indeed scarcely coincide with their original inner coherence. This is nothing to the purpose; until the true inner coherence of the original written characters, of which I have no doubt, has been discovered, the symmetrical whole above described will at least outwardly show the scholar the possibility of such a coherence.

It suffices to know that the Latin capitals at least appear, by means of this whole, in outward coherence and outward unity.

Besides, it is a peculiar fact, and one that should not be overlooked, that the Latin capitals make a very agreeable and particularly satisfactory impression upon the younger boys.

The most essential point in the use of the characters above named for the first writing is, that these written signs are easily understood by the scholars at this stage, and can be easily and quickly represented according to the different positions and lengths of the vertical, horizontal, and oblique lines already so much used.

The instruction in writing, directly joining the exercises of speech, and actually proceeding from them as a necessary condition, is as follows: —

The teacher first develops the necessity of the individual writing signs, in his scholars, by leading them to perceive that not only the knowledge of the precise signs for the simple elements of words, but also skill in the use and combination of these signs is required.

The writing itself is done on the often-mentioned squared slate; it begins with that one of the written characters which is the easiest to represent, — a vertical line denoting the vowel *i*.

The teacher begins: —

"Sound the voice-sound *i* several times."

The scholars do so, "*i*; *i*; *i*."

"Make on your slates three times a vertical line of two-fold length, and say after making each, 'This denotes the voice-sound *i*.'"

The scholars do so.

"|, this denotes the voice-sound *i*."

"|, this denotes the voice-sound *i*;" etc.

"You have now made, three times, the form which denotes the voice-sound *i*."

"What have you done?"

"Each of you may make on his slate several times more the form which denotes the voice-sound *i*."

"Make on your slate a vertical line of two-fold length." [The teacher always does the same on the blackboard, after the scholars have done it on the slates.] "From the upper end of this line draw down a whole slanting line of two-fold length; from the lower end of this line draw a vertical line upward."

"Have you done it?"

"What have you done?"

"We have," etc.

"Make this sign three times on your slates, and say each time, 'This denotes the open sound *n*.'"

"Say the word *in* three times."

"What are the elements of the word *in*?"

"The voice-sound *i*, and the sharp nose-sound *n*."

"Can you make the signs for both?"

"Now write three times the word *in*."

They write: —

IN — IN — IN —

[The teacher observes whether it is correctly written; then effaces all, and requires them to write the same word several more times. It is well as soon as possible, while the signs are still few, to introduce the following questions.]

"How many written signs (or letters) have you now?"

"Can you make any other words with these letters?"

Should the names of the letters have already obtruded themselves, it is well to keep them as much as possible in the background, so that the thing itself may make a firmer impression on the mind of the scholar; but as the name comes in as a demand not to be rejected, it may be written several times as a *name*, so that the scholar may grasp and hold fast the distinction between the *thing* itself (the vowel or

consonant), the name of the thing (for example, *en*), and the sign for the thing (for example, N), and never confound them. To early impress this three-fold distinction on the scholars is very important for the following instruction.

The teaching continues: —

"ei; ei; ei.[1] — Repeat this voice-sound several times."

"Is the voice-sound *ei* a simple sound?"

"No; it is a compound sound." This the exercises in speech developed.

Since it is not a simple sound, it is well to denote it, not by a simple, but by a compound sign.

The teacher, writing: —

"This is the sign for the *ei*,

E͡I

"What lines form the sign E͡I, and how are they joined together?"

"Write these signs several times, and pronounce each time the voice-sound *ei*."

"What have you done?"

"How many signs or letters can you now write?"

"Three, — I — N — E͡I."

"What words can you write with these?"

Teacher and scholars find together, first the words already written, then the words made possible by the new sign.

"Good; we will write them."

"What elements make each of the words?"

"Write each of these words three times."

"How many words can you now write?"

"What words can you now write?"

"Write all the words that you can, one, two, three times."

[At the beginning of each lesson at least, all the words which were newly written in the last are repeated.]

"Pronounce the voice-sound *u* several times."

The teacher writes U, and says, at the same time, "This is the sign for the voice-sound *u*."

"Write this sign also several times."

"What words can you now write with this, and the signs you have before made?"

[1] *Ei*, which in English is a digraph, is, in German, a diphthong. The remarks and questions concerning it are retained to show the proper mode of procedure with our own diphthongs. — Tr.

Teacher and scholars find words together.

All these words are analyzed and written.

"Proceed in the same way with the voice-sound *o*."

"Make a line of two-fold length; from the upper end of it a half-slanting line of single length; from the lower end of this draw up toward the right a half-slanting line of the same length; from the upper end of this, draw a vertical line of two-fold length."

"Have you done it?"

"What have you done?"

"You have made the sign for the closed sound *m*."

"What have you made?"

"Write several times on your slates the sign for the closed sound *m*, and say each time, 'This denotes the closed sound *m*'; or make the sound every time you write the sign."

"Write several times the closed sound *m*."

Proceed in the same way with the voice-sound *a*; this gives *an*, and *man*.

The course of instruction continues to advance in the simplest words.

"Make the rolling tongue-sound *r*, *r*, *r*."

The teacher writes *R* on the blackboard, says as above, and requires the scholars to write this sign several times.

"What words can you now write with this sign, and those which you have before made?" Teacher and scholars find the words together. They now progress to *v*; from that to *w*; then to *l*; to *h*, to *t*, to *k*, etc., etc., in accordance with the law of advancing from the easier to the more difficult; but especially on account of the immediately following connection of reading-print.

The most important point of this course of instruction, which is, however, as easily recognized as represented, is that the boy never learns any thing which he is not immediately required to use in many ways; for it is a law of the instruction that every newly-learned letter must be connected with all the former ones; that is, that the scholar must seek out *all* the words which can be written with this new letter and those which were previously learned. This gives new charm and life to the instruction.

From the words of one syllable we advance to those of two and more syllables by a way of teaching as easy to define as to represent.

When the scholars are tolerably assured in the visible representation of each word which they have heard, spoken, or only thought, words are enunciated without any great choice, which the scholars must write; or the scholars are allowed to write words, and soon little thoughts as they occur. When the boys have advanced to this point, they are required to copy on paper all which they have written on the slate, and which the teacher has examined; this is made the rule of the school. This also gives at once a ready means of employing the boys whose work has been already examined by the teacher while he is correcting the work of the other scholars; for it need scarcely be said, that the correction must always be done by the scholars themselves under the direction of the teacher. It is also very advisable with this, as with similar instruction, that the advanced scholar, who to a certain extent is, in this respect, superior to another, should sit by the other, and be charged with examining and correcting the work of his weaker companion. This proceeding has a many-sided inward and outward utility which can scarcely be established by words: first, all the scholars are kept constantly employed; secondly, the weaker ones are impelled by it to emulate the stronger; and thirdly, the stronger, by this means, tests what he knows and can do, thereby coming to the knowledge of what is yet lacking to him; for it cannot but be that the teacher will frequently notice mistakes which have been overlooked by the correcting scholar, or rather which he has not recognized as such. No prominence need at first be given to the fact that this instruction in writing leads directly to actual writing, and prevents this teaching, now as wearisome as it is difficult, from being a tedious independent subject of instruction.

This instruction is closed when the scholar can readily represent in this way all the ideas and thoughts of which he is conscious within the circle of his life, and can thus, as it were, represent his inner life itself (this is similar to the stage of representation of line, color, and word-wholes previously recognized with the line, color, and language exercises); for *man*, the *middle*, the *general point of reference*, is found, and the representation of his inner nature is made possible at and in his first stage; there, by lines and colors, as before by movable and plastic material, and, as here, by word; there, with the language exercises by the vanishing, here, by the abiding word. Thus each stage of the instruction must, in a certain respect, be a whole in itself, a whole representation of the inner nature of man. It must make possible the representation of some kind of a whole in reference and relation to the inner nature of man.

By this requirement just mentioned, namely, that the scholar must transcribe upon paper in its corrected state what he has represented on the squared slate as his *own* ideas or his *own* perceptions, and which has been corrected for him by a more advanced pupil (which has a many-sided but easily conceivable utility), the boy is soon led to the essential need of a quicker way of writing. This, therefore, is now the point at which the learning to write our current hand appears as a branch of instruction; for, as has been already said, each new instruction should be linked with the *need* for it in the boy, and should meet this need. The province of the earlier and preceding instruction, and the demand made upon it, is to develop the need for each following and necessary instruction with precision and activity, in the boy. The province of the later instruction, and the demand made upon it, is, on the contrary, to meet those awakened earlier needs as soon, as exhaustively, and as satisfyingly as is possible *in accordance with the laws of spiritual health.* Our present manner of instruction and teaching up to this moment fails in these two simple and essential points, as well as in other essential points which clearly proceed from what has been hitherto expressed and brought forward. Not only to bring this want to unequivocal recognition and insight, but also immediately to set up a course of teaching which avoids these errors, is the requirement of the art of instruction toward which, not only we, but the whole human race, at the stage of manly development at which it now stands, needs to strive, and toward which we also, being conscious of ourselves and the time in which we live, need to strive.

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q.

READING.

Section 103.

Reading is the pure reverse of writing. Writing and reading are as opposite as giving and taking, and as taking presupposes a giving, indeed, as, strictly speaking, one neither may nor can take any thing, indeed cannot at all understand how to take any thing, cannot receive and use what is taken, if one has not beforehand actually given, so from this point of view also the reading must come later than the writing in the case before us.

The course of instruction proceeds necessarily from the nature of the thing, and is just as easy to recognize as to represent; for the boy can actually already read according to the primitive and subordinate idea which is connected with this word. Reading was already the second inseparable act with every word which the boy has hitherto written; an act of which special use was made when he later copied what he had himself thought or seen.

Reading, in the usual sense and according to the usual school-meaning, that is, reading printed letters and words, is now very easily attained, and what would otherwise have been scarcely accomplished in more than a year, and by burdening the boy, he can now very easily accomplish in a few days with pleasure.

The first thing necessary is that the like significance of the small printed letters with the Roman capitals hitherto used for writing should be recognized. It is not sufficient merely to place them side by side, and say, for instance, *l* is *l*, *o* is *O*, *u* is *U*, etc., but it is especially important to demonstrate how the principal strokes of one kind of letter are contained in the other, which is very possible if a little attention be paid to it.

With the further progress of learning to read print, any reading-book can be used.

As a means of connection between writing with the often-defined script and reading print, it is very useful to have the scholars first write certain exercises from the reading-book upon the squared slates with the script hitherto used, and then read them in the reading-book with comparison.

The point which the boy must reach by this instruction at this stage of his total development is that he read precisely and clearly with correct utterance of letters and words; and that he also point out the different kinds of separations and consequent groupings conditioned by the connection; and also indicate different pauses by their length, and keep them in mind. The boy is thereby developed to such an extent that it is possible for him to appropriate to himself the thoughts of others; to test his own thoughts and sensations by the thoughts and sensations of others; and thus to raise himself to each possible stage of development and cultivation conditioned by human nature as well as by his own individual nature. In accordance with its nature the higher descriptive reading is postponed to the following stage of development.

V.

SURVEY AND CONCLUSION OF THE WHOLE.

Section 104.

We have thus delineated man from the beginning of his existence, as he becomes and appears, on all the sides and in all the stages and conditions of the development of his nature up to the stage of boyhood and within it; we have also brought before our view, in their inner living coherence, in their necessary reciprocal conditioning, and natural ramifications, and in their whole importance, the means by which man can and will be developed in this space of time which is under consideration, in a manner corresponding to and satisfying the requisition of this space of time, and that of his whole nature, if his aim be completeness.

If we now survey all that has been hitherto recognized and expressed in reference to this, we see that many phenomena in the life of the boy have as yet by no means a particular, precise direction. So, for example, the employment with colors has by no means as yet in view the training of a painter; and just as little has the employment with tune and song the object of training a musician. But these employments aim at and produce, first of all, in man, an all-sided development and presentation of his nature; they are, in general, the needful food for the spirit; they are the ether in which the spirit breathes and lives that it may gain power, strength, and, I might add, extent, because the spiritual qualities given by God to man, which proceed from his spirit in all directions with irresistible necessity, necessarily appear as manifoldness, and must be satisfied as such, and met in manifold directions.

Wherefore we might at some time conceive that we have a very disturbing influence on the boy's nature by too much repressing and suppressing those necessary, many-sided directions of the spirit in the human being as he advances toward maturity; by even believing that we do a service to God and man, especially to the boy himself, that we favor his future earthly welfare, inner peace, and heavenly salvation, by cutting off these directions and those qualities of the spirit, and especially by then ingrafting and cramming others in their place.

God does not cram and graft: therefore the human spirit, as a divine spirit, must not be crammed. But God *develops* the smallest and the most incomplete in constantly advancing succession, according to eternal laws founded in and developing from themselves. And God-likeness should be man's highest aim in thought and action, especially when he stands in fatherly relations to his children, as God does to man.

We should finally, in reference to the education of our children, thoughtfully reflect upon the fact that the kingdom of God is the kingdom of the spiritual: that therefore the spiritual in man, and consequently in our children, is at least a part of the spiritual kingdom, that is, of the kingdom of God, and that therefore the *general* cultivation of the spiritual in man, in our children, is the cultivation of that which is actually human, that is, of the divine as an isolated phenomenon: and we should devote our attention to it as such, being convinced that each one who has been genuinely formed to a human being is then also educated for each single requisition, for each single need in civil and social life.

We may now say, indeed, "This is all very good, but it is no longer applicable to our sons: the application and use of it is too late for them, for they are already in the last quarter of boyhood. What are they now to do with this wholly general and fundamental instruction? They must necessarily receive definite individual instruction directly bearing upon their future vocation: for the time of their entrance into civil life, the time when they must think of earning their living, or assisting us in our business, is too near."

We are right: our sons are old for what they have yet to learn.

But why have we not given them as children and in the beginning of boyhood what their spirits must require?

Shall the boys now lose this development and training for their whole lives?

We now say, "When the boys are grown up, they can retrieve all that: they will then have enough time free for that."

Fools that we are! When we say this, we are contradicted by our inner nature, if we will only listen to, and attend to the significance of what it says. Here and there, something may be retrieved, to determine which does not belong here: but in general what has been omitted and neglected in the education and development of man in boyhood is never retrieved.

Do we as men and fathers, and perhaps also as mothers, not wish

to be sincere at last, and do we wish to hide from ourselves the never-healing wounds which bleed all through life, or the callous places in our minds, never again to be softened, or the dark spots upon our souls (caused by wiping away noble, estimable sensations and thoughts) from which our souls can never again be clear, all which is produced by the misguidance and misleading of our youth and especially of our boyhood?

Do we not wish to see in ourselves all the noble germs which were pressed out, caused to decay, and even killed in the mind of man at that stage of life?

Will we not confess this to ourselves, and consider this for the benefit of our children?

We have an important charge; we have an extended vocation; we have a profitable business; we have versatility of life; we rejoice in fine, polished, social training; can all this prevent the gaps and patches of our inner training from coming before our souls when we question them, and can it destroy in us the feeling of this condition of inner training which is caused chiefly by the imperfection and incompleteness of our youthful education?

Therefore, if we would have our sons become capable, whole men, if they are already even in the last third or fourth stage of boyhood, and have not yet learned and developed what they should have learned and developed in childhood and boyhood, they must necessarily return to childhood and to the beginning of boyhood in order at least not to continue to delay doing what is still possible to do, and to retrieve what it is yet possible to retrieve.

It may indeed be that our sons will come a year or two later to that at which they aim, but is it not far better that they should come to a true aim than to a false one?

We wish to be live men, and do we so little understand the requisition of true, genuine life? We wish to be men of business, and men who understand our calculations, and do we so little understand the business which yet lies so near to each, and can we so very badly calculate in circumstances so highly important?

We pride ourselves on being so rich in the experience of life, and yet this experience shows itself so little where we might reap the refreshing fruits of it.

We generally disdain to cast back into our own youth the examining glance from which we could learn so much that would be a blessing to us and to our children; for this requisition also — "turn back

observantly into your own youth, and awaken, warm, and vivify the eternal youth of your mind" — lies in the words of Jesus, — become as little children.

As it is generally true that much that Jesus said in his time and to his companions, the Spirit also now says to us and to our time, and as generally in all human references with regard to the whole human race, what was said in the time of Jesus, and especially what was said at the beginning of a quite new view of life, finds its application to the attainment of a new and higher stage of human perfection, and is, as it were, repeatedly spoken anew to the whole human race, so now is said also to us, "If you will not fulfil in yourselves and in your children all which man spiritually requires at the stage of childhood and boyhood, if you will not give this to yourselves and to your children, you will not attain what has swelled and swells your hoping soul in the happiest, most blessed times of your life; that for which your heart longed with deep, yearning sighs in the noblest hours of your life; and which swells and ever swelled the souls of the noblest men, and filled and now fills their hearts."

If we now reduce to a point the stages and the aim of the cultivation which man has attained by the manner of developing education and instruction hitherto brought forward, we perceive with great clearness the fact that the boy has come to the point of divining his independent spiritual self; he feels and recognizes himself as a spiritual whole. There is roused in him the capacity of taking in a whole, as well in its unity as in its manifoldness; and there has germinated in him the capacity of outwardly representing a whole as such, and in its necessary parts, and of representing himself in his unity, and in the manifoldness of his nature, in and by manifoldness.

We therefore find and recognize man as already fitted even in boyhood for the highest and most important task of life, — the fulfilment of his destiny, his vocation, the representation of the divine nature within him.

The future life of man in corresponding stages of his development and cultivation from boyhood to manhood is devoted to raising this capacity to skill and certainty, to consciousness, to insight, and clearness, to a freely-chosen life. The continuation of this work, and the life of the writer, are devoted to demonstrating the way and means for this, and to introducing these into life and in actuality. And as boys of the age to which this book belongs, of fresh spirit, glad courage, joyous mind, and happy life, who, during the writing of the

book entered the educating circle from which it proceeds, and who mostly surrounded the writer during his writing, playing, never becoming weary, requiring ever new satisfying and nourishment of their impulses to activity and life, and so freely forming their being from themselves, are his security (if an outward security be needed) that he has written the truth; they are also his security that he will write the truth.

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